

# GEORGE SMITH & Co.

## Art Metal Workers AND SANITARY ENGINEERS.

### SECTION II.



ELEVATION OF LONDON PREMISES, 193, UPPER THAMES STREET, E.C.

# SUN FOUNDRY, GLASGOW

London, Dublin and Manchester.



~~Q2.F.~~







92. 0. 31A



CATALOGUE  
OF  
ARCHITECTURAL AND ORNAMENTAL CASTINGS,

MANUFACTURED BY

GEORGE SMITH & CO.,

ARCHITECTURAL IRONFOUNDERS AND SANITARY ENGINEERS.

CONTRACTORS, BY SPECIAL APPOINTMENT, TO HER MAJESTY'S WAR DEPARTMENT.

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SECTION III.

SCHOOL FITTINGS, &c.

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GEORGE SMITH & CO., SUN FOUNDRY, GLASGOW;

193 UPPER THAMES STREET, - LONDON, E.C.;

5 GRENVILLE STREET, - DUBLIN.



*Presented to*

*R. M. Phipson Esq Norwich*

*With GEORGE SMITH & Co's Compliments.*



11. 8. 85.



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NOTE.—All our Manufactures are coated with best Oil Paint, (except where Galvanized or Enamelled,) before leaving the Works.



## INTRODUCTION.

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GEORGE SMITH & CO. respectfully invite the attention of Architects, School Boards, and others to the following pages, comprising Section III. of their CATALOGUE, which illustrates their manufactures in SCHOOL FITTINGS, &c. Advantage has been taken of the present issue to show the most recent improvements, which have already received the hearty approval of the principal Architects and School Boards in the kingdom.

It is scarcely necessary to particularize, but attention might be called to Plates 2, 3, 10, and 13, which show appliances specially designed in accordance with the Rules issued by authority of The Committee of Council on Education.

The following articles are also manufactured by GEORGE SMITH & Co., and Architects, Engineers, &c. are respectfully invited to inspect Specimens which have been fitted up at the Show Rooms, SUN FOUNDRY, GLASGOW; and 193 UPPER THAMES STREET, LONDON, E.C.

PATENT URINALS, in Iron or Slate.

PATENT WATER CLOSETS of every description, for Private Houses or Public Works.

PATENT WATER WASTE PREVENTERS in Iron Cisterns; also, for existing Cisterns, or combined with Closets.

PATENT SHIP CLOSETS.

DRY PAN CLOSETS, in Iron Erections.

PATENT WASH-HAND BASINS, Plain or Enamelled, Single or in Ranges.

BATHS, Plain or Metallic Enamelled, with or without Patent Fittings, ready for attaching to the Main.

PATENT ORNAMENTAL DRINKING FOUNTAINS, for Streets or Railway Stations.

ORNAMENTAL JET FOUNTAINS, from £2 to £2000.

STREET DRINKING CATTLE TROUGHS, with Iron Base and Dog Trough.

PUMPS, Plain and Ornamental, with or without Lamps.

RAIN WATER PIPES and GUTTERS, Plain and Ornamental, with all their connections.

STREET REFUGE LAMP PILLARS, Plain and Ornamental, with from one to six lights.

LAMP PILLARS for Pedestals.

GAS and ORNAMENTAL BRACKETS.

CLOCK BRACKETS.

CRESTINGS, FINIALS, WEATHER VANES, BANNERETS, CROSSES.

BALCONETTES, BALUSTRADES, VERANDAHS.

PORCHES, PILASTERS.

ORNAMENTAL COLUMNS and MULLIONS.

FLOWER VASES, RAILINGS, GATES, GATE PILLARS, with or without Lamps.

GALLERY RAILINGS and BRACKETS.

COMMUNION RAILINGS, OFFERTORY PLATES.

DESK and BENCH STANDARDS.

REGISTERED STABLE FITTINGS.

Every description of FITTINGS for Churches, Schools, and Public Buildings; and all kinds of CAST IRON ORNAMENTAL WORK for House and Garden Architecture.

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# GEORGE SMITH & CO.,

## ARCHITECTURAL IRONFOUNDERS AND SANITARY ENGINEERS.

SUN FOUNDRY, - - GLASGOW;

193 UPPER THAMES STREET, LONDON, E.C.;

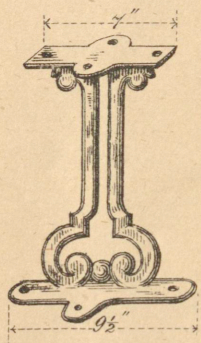
5 GRENVILLE STREET, - DUBLIN.



## REGISTERED SCHOOL FITTINGS.

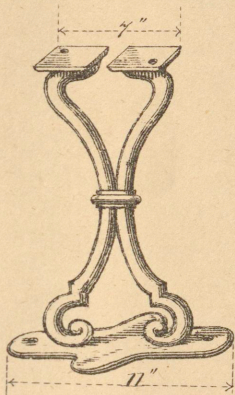
A very large variety of these may be had, suitable for almost any possible requirement. They embrace recent improvements in single and double-folding book-boards, folding-seats, book-shelves, slate-racks, &c., which may be seen on referring to the drawings. Attention has also been paid to secure freedom of ingress and egress, and to neatness and strength, each article being provided with cross flanges and sufficient screw-holes.

## BENCH STANDARDS.



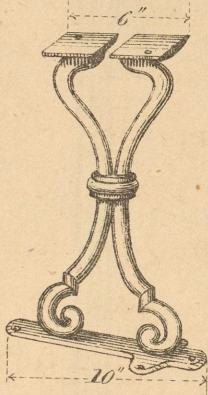
No 47.

9, 10, 11, 12, & 13 INS.  
HIGH OVER WOOD.



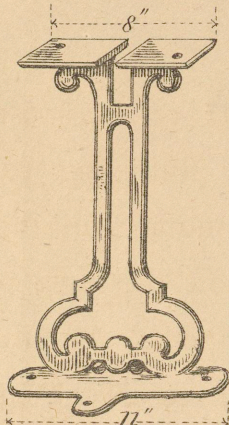
No 50.

10, 11, 12, 13, 14, 15, 16, 17,  
& 18 INS. HIGH OVER WOOD.



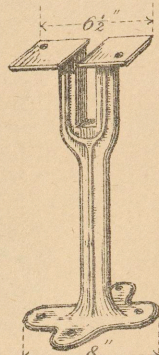
No 51.

17 1/2 INS. HIGH OVER WOOD  
FOR AN INCLINE OF 1 IN 6.



No 48.

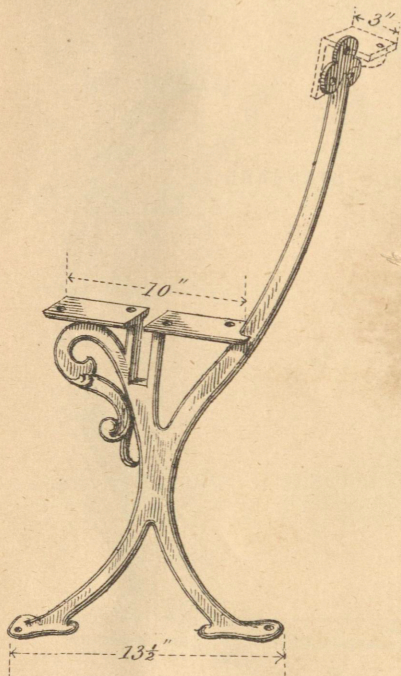
14, 15, 16, 17, & 18 INS.  
HIGH OVER WOOD.



No 42.

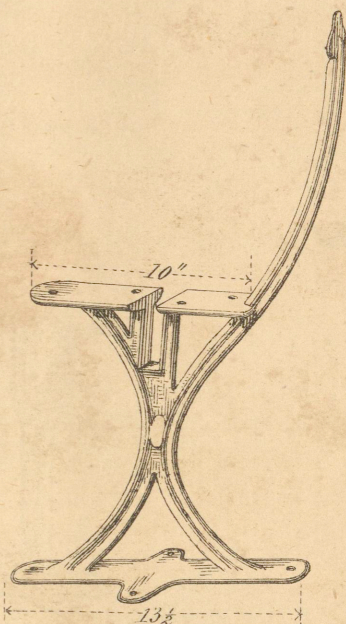
14, 15, & 16 INS.  
HIGH OVER WOOD.

## BENCH AND BACK RAIL STANDARDS.



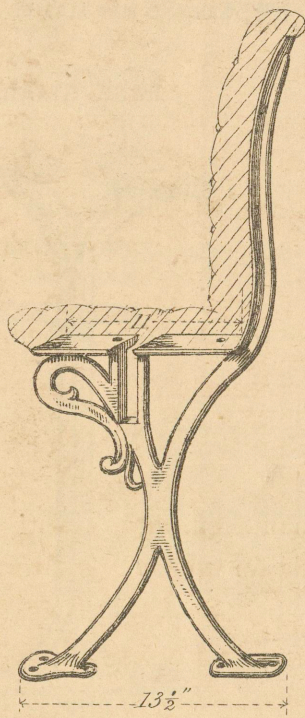
No 3.

WITH OR WITHOUT BOOK BOARD  
12 X 24, 14 X 27, 16 X 30, 17 X 31,  
& 18 X 32 INS. HIGH OVER WOOD.



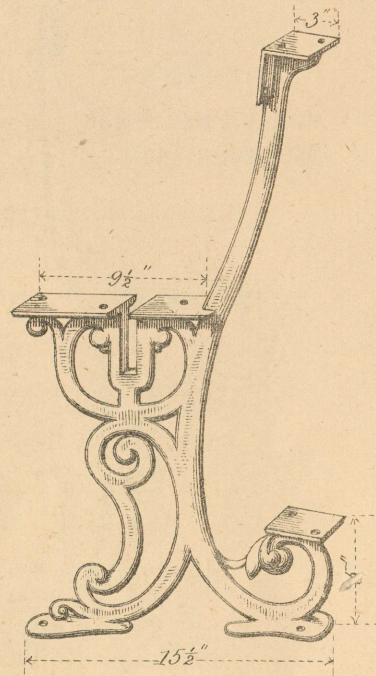
No 67.

12 X 23, 13 X 24, 14 X 25, 15 X 26,  
16 X 27, 17 X 29, 18 X 31 & 19 X 33  
INS. HIGH OVER WOOD.



No 59.

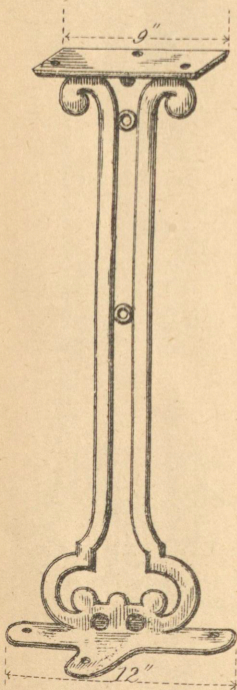
FOR CHURCHES, HALLS, THEATRES &c  
30 X 17, 32 X 18 & 33 X 18 INS.  
HIGH OVER WOOD.



No 8

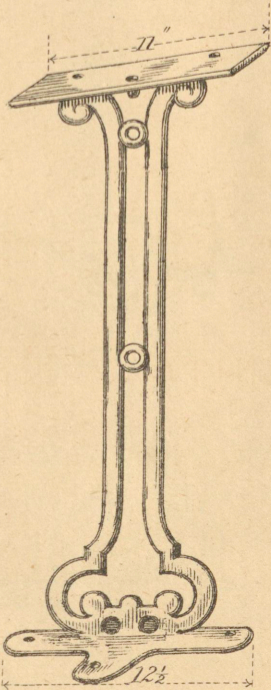
WITH KNEELING BRACKET.  
16 X 31 INS. HIGH OVER WOOD.  
16 X 30 " " " " " "  
WITH 8 IN. BOOK BOARD.

## DESK AND TABLE STANDARDS.



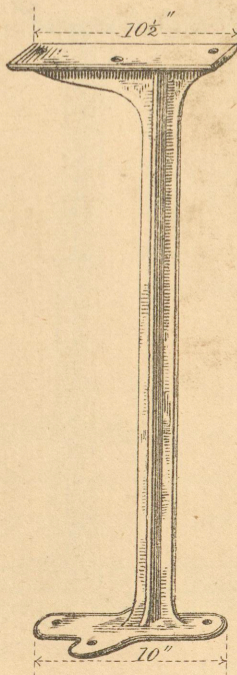
No 6.

24, 28, & 30 INCHES  
HIGH OVER WOOD.



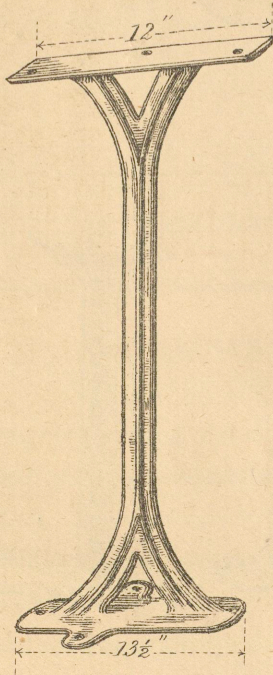
No 5.

27, 28 1/2, 30, 30 1/2 & 33 1/2  
INS. HIGH OVER WOOD.



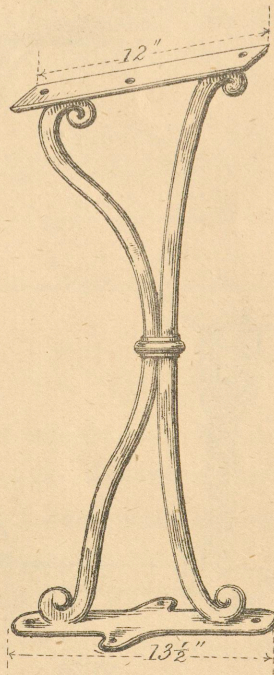
No 20.

27 INCHES.  
HIGH OVER WOOD.



No 52.

26, 27 1/2 & 29 INS.  
HIGH OVER WOOD.

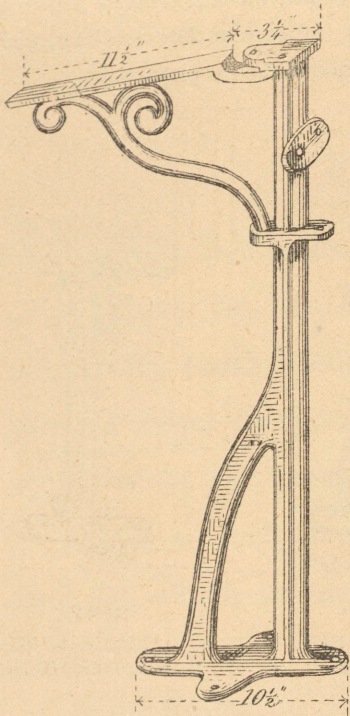


No 60.

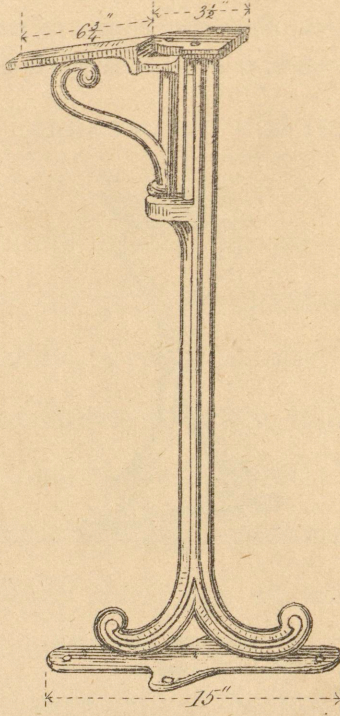
24, 25, 26, 27, 29, 30, 31,  
& 32 INS. HIGH OVER WOOD.



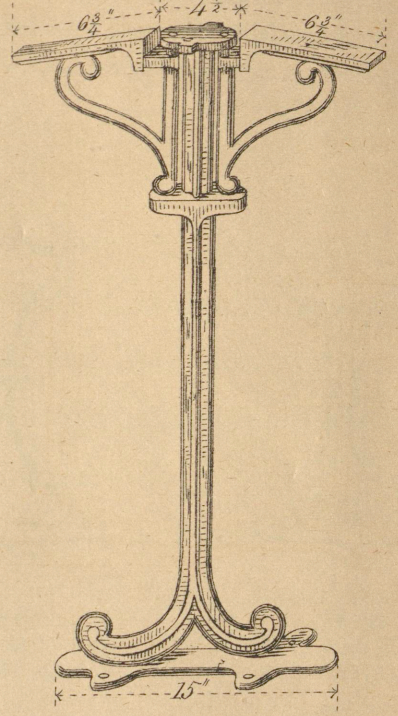
FOLDING DESK STANDARDS.



Nº 24.  
30 & 32 INS. HIGH OVER WOOD.

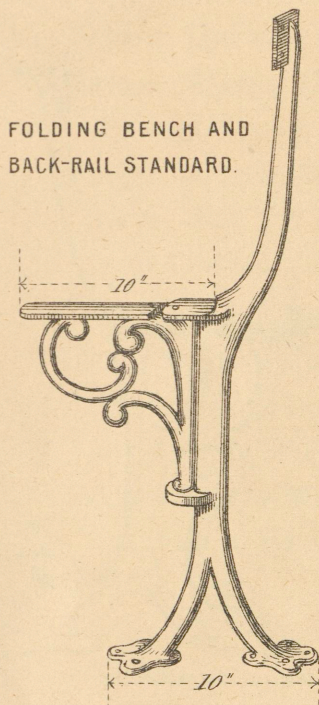


Nº 54.  
28 1/2, 30, & 32 INS. HIGH OVER WOOD.

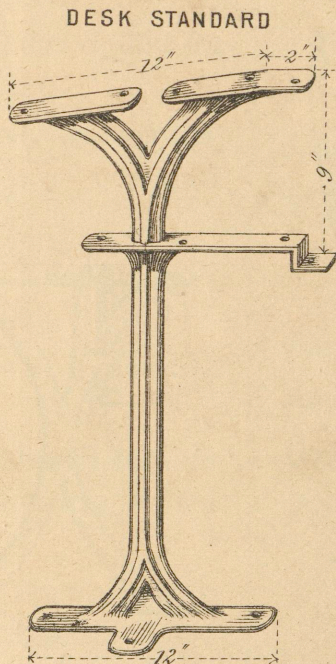


Nº 55  
27 INS. HIGH OVER WOOD.

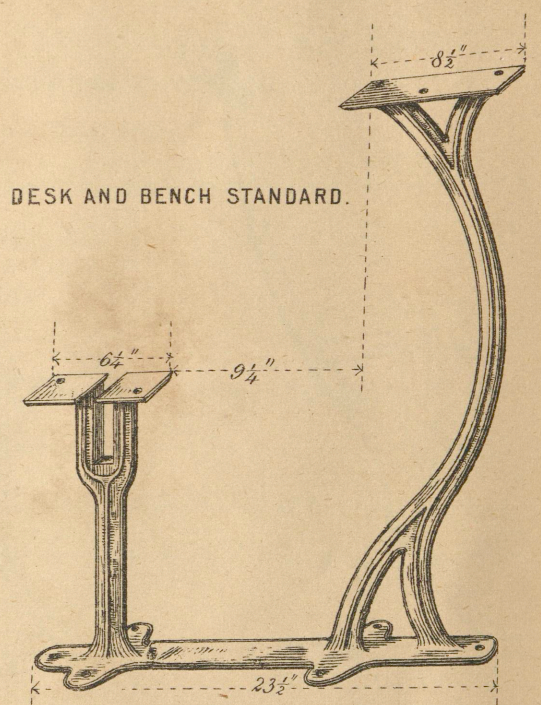
NOTE: Nºs 54 AND 55 MAY ALSO BE HAD WITH BRACKETS OF 4 1/2" AND 10 1/2" PROJECTION.



Nº 61.  
32 INS. HIGH.

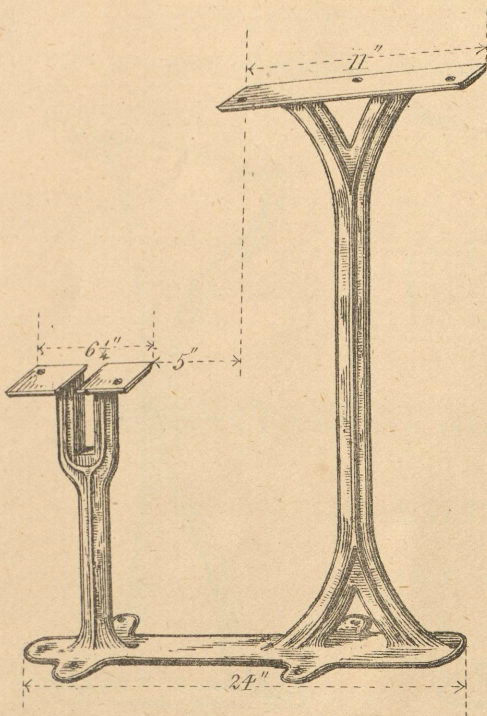


Nº 41.  
26, 27 1/2 & 29 INS. HIGH OVER WOOD.

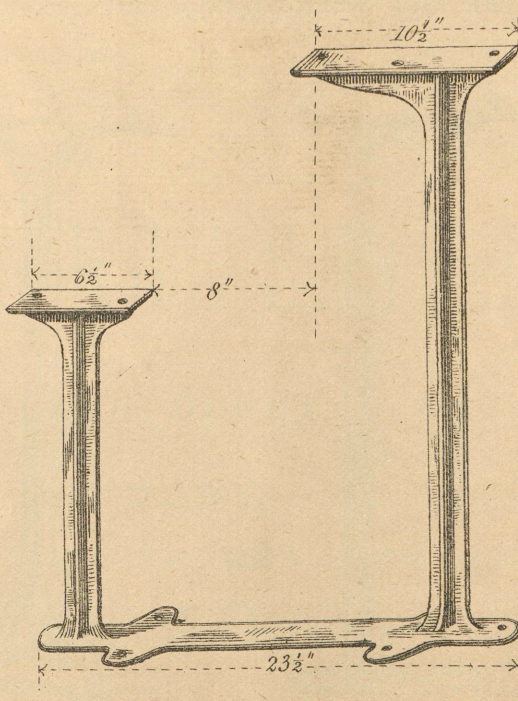


Nº 53.  
23 X 15 INS. HIGH OVER WOOD.

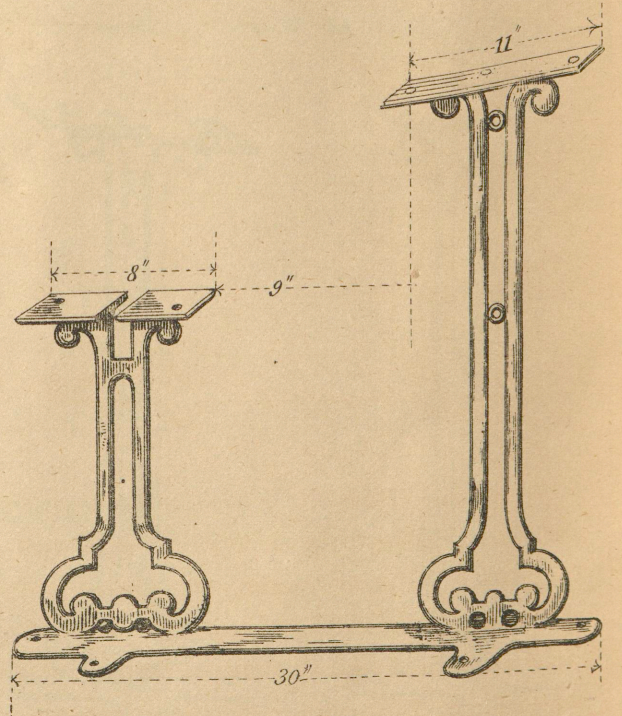
DESK AND BENCH STANDARDS.



Nº 23.  
26 X 14, 27 1/2 X 15 & 29 X 16 INS.  
HIGH OVER WOOD.

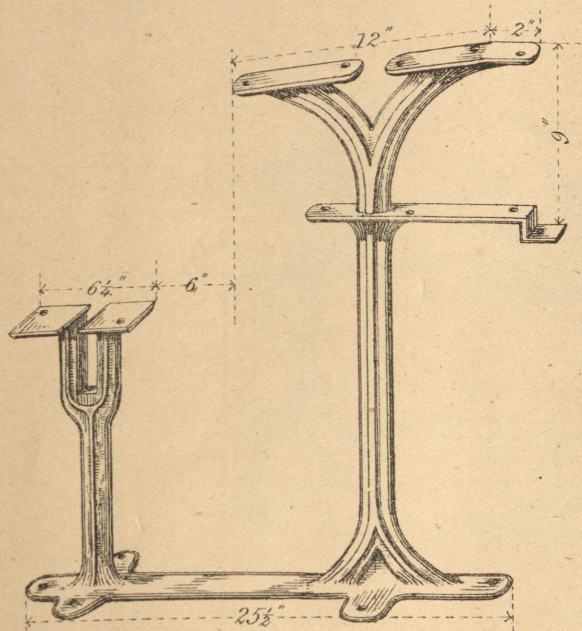


Nº 19.  
27 X 18 INS. HIGH OVER WOOD.

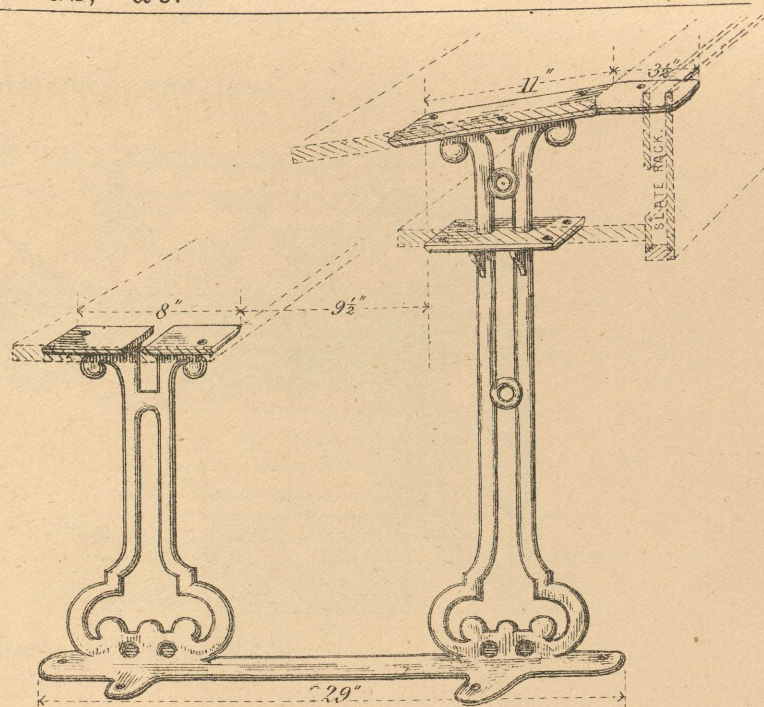


Nº 63.  
27 X 13, 28 1/2 X 15 1/2 & 29 1/2 X 16 INS.  
HIGH OVER WOOD.



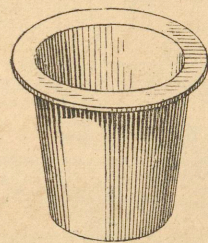
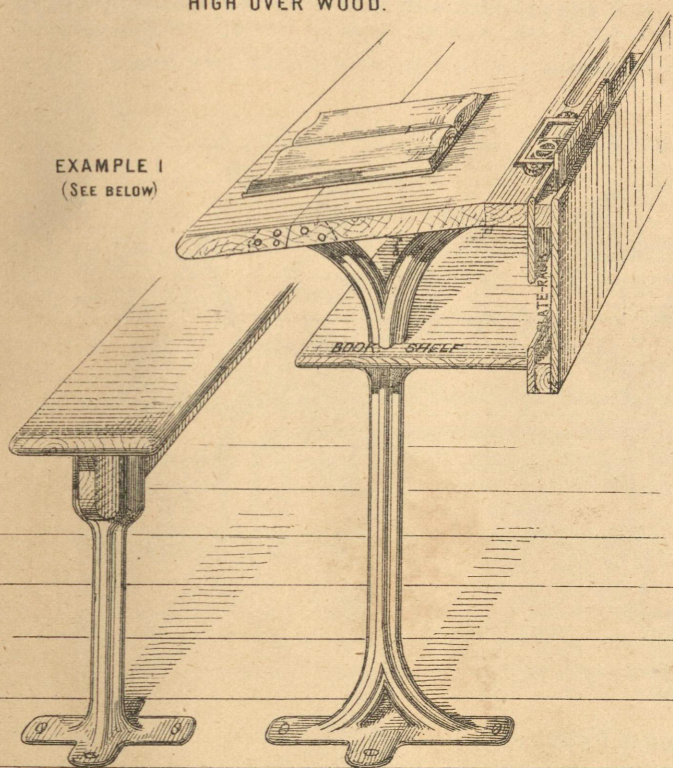


No. 43.  
26 X 14, 27 1/2 X 15, 29 X 16 INS.  
HIGH OVER WOOD.

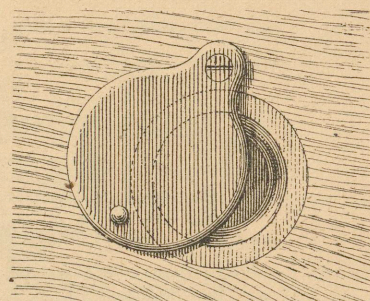


No. 65  
WITH OR WITHOUT BOOK-SHELF.  
28 X 15 1/2 INS. HIGH OVER WOOD.

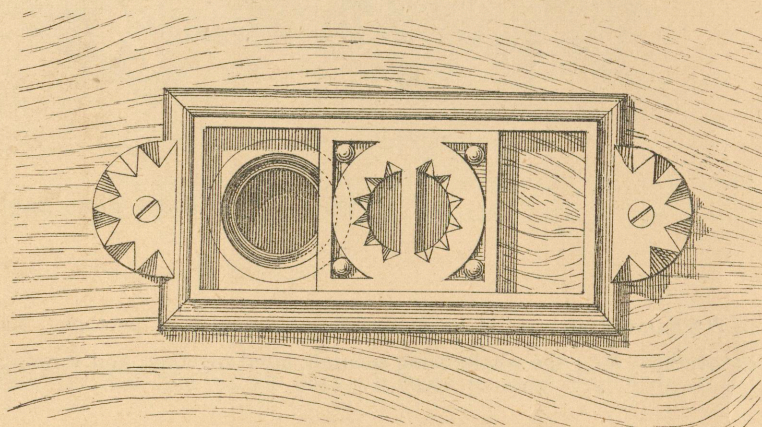
EXAMPLE 1  
(SEE BELOW)



No. 1. INKWELL.  
(HALF SIZE)

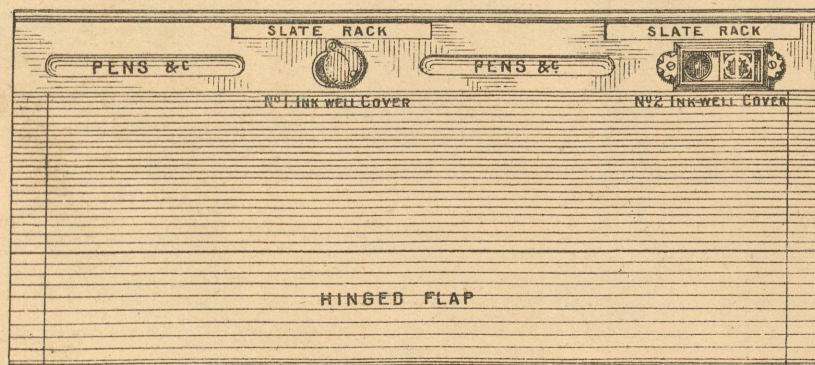
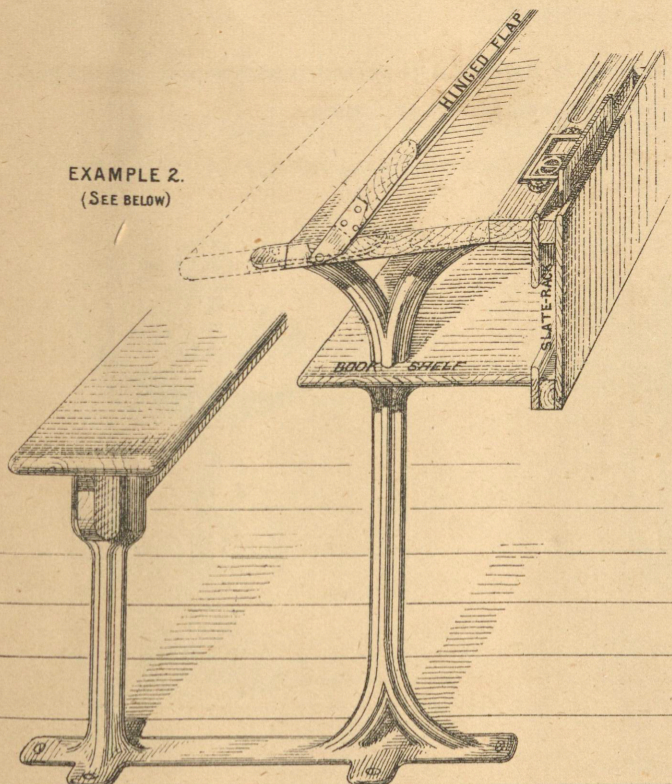


No. 1. INKWELL COVER,  
(HALF SIZE)



No. 2. INKWELL COVER.  
(HALF SIZE)

EXAMPLE 2.  
(SEE BELOW)



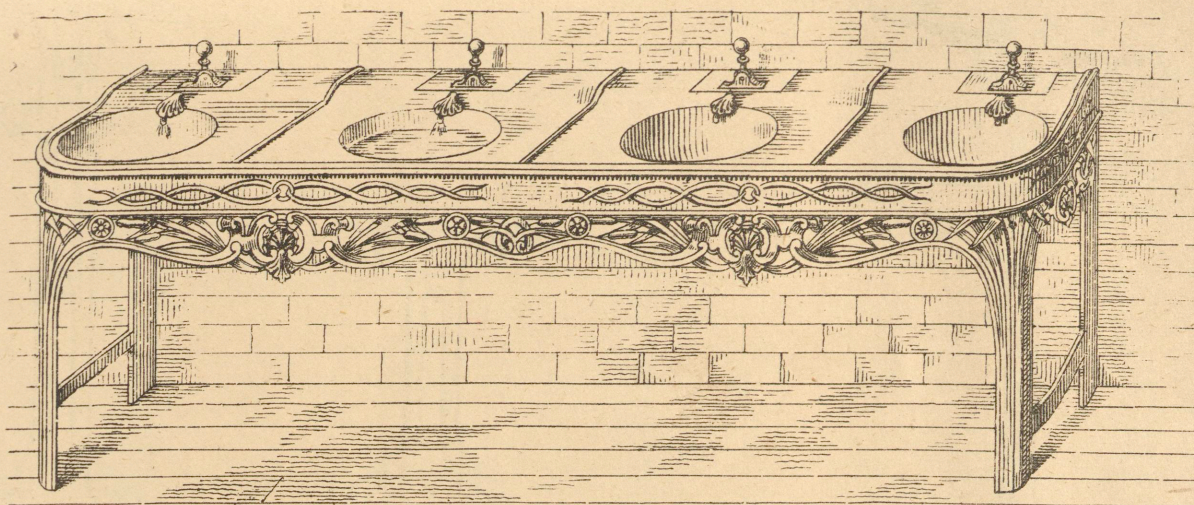
PLAN OF No. 41 DESK.

Example 1 shews No. 41 Desk, and No. 42 Bench Standards, with wood work, &c., complete, including the most recent improvements, viz.:—Book-shelf, Slate-rack, hinged flap on desk to allow freedom of ingress and egress, while giving a desk which is comfortable for sitting at. Example 2 illustrates No. 43 Desk and Bench Standard, with wood work complete, and having the hinged flap turned up. The Architect to the London School Board says regarding this form of desk: "This improvement solves the problem of making school desks and benches suitable both for sitting and standing. . . . One important feature in these desks is their extreme simplicity. There is no gearing, no ingenious machinery, nothing for a child to tamper with, nothing to get out of order, so far as such a consummation is possible where children are concerned. Each child has a book-shelf, a slate-rack, a groove for pens and pencils, and an ink-well at his right hand." See plan of top.

Nos 1 and 2 INKWELL COVERS, convenient and cheap articles for preserving the ink from evaporation and dust.

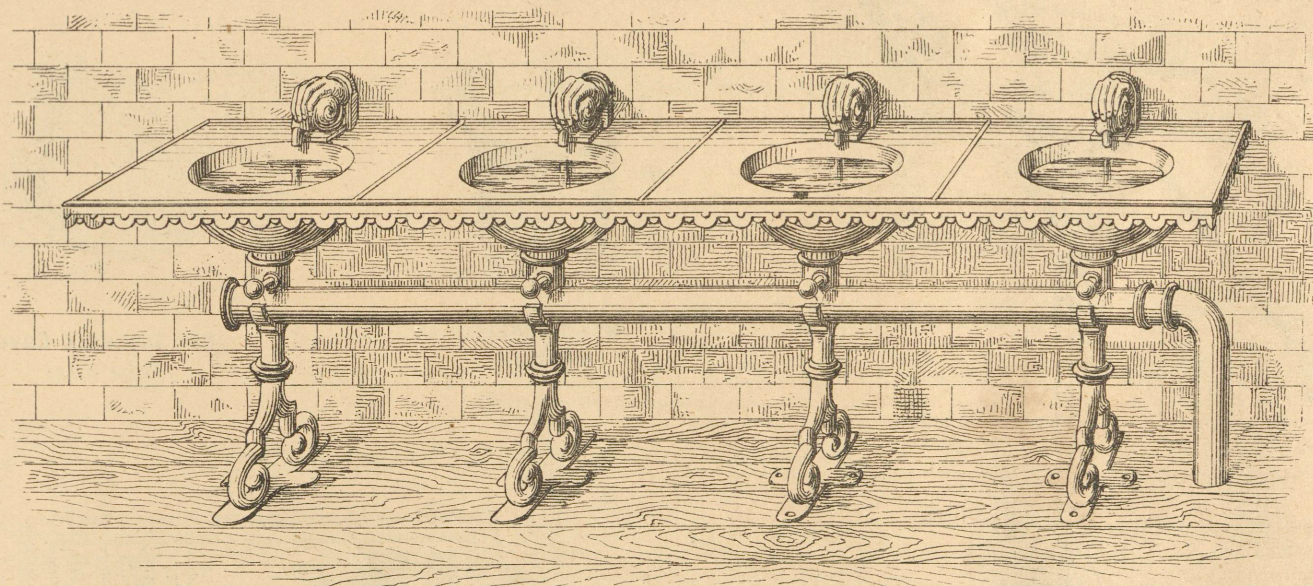


## SANITARY APPLIANCES:-LAVATORIES &amp;C.



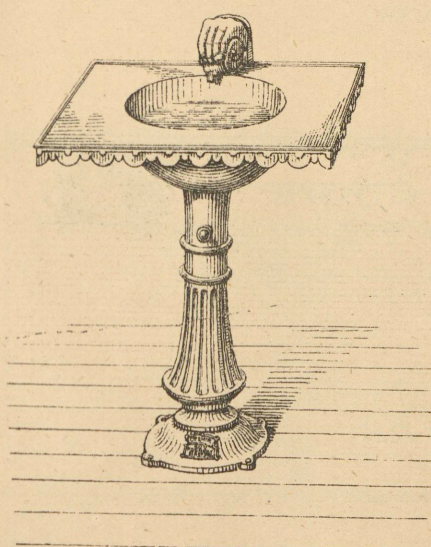
Nº 3 WASH HAND BASIN RANGE, FOR 4 PERSONS.

Nº 3 is a very handsome form of Lavatory Range, made for any number of persons. Each basin is complete in itself, and is fitted with a patent valve apparatus, the handle of which controls both supply and discharge. It is also provided with an overflow, and may be had painted or enamelled with Patent Metallic Enamel.

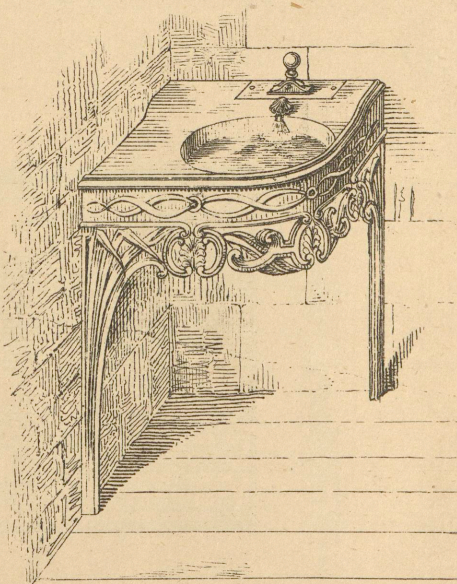


Nº 17 WASH HAND BASIN RANGE, FOR 4 PERSONS.

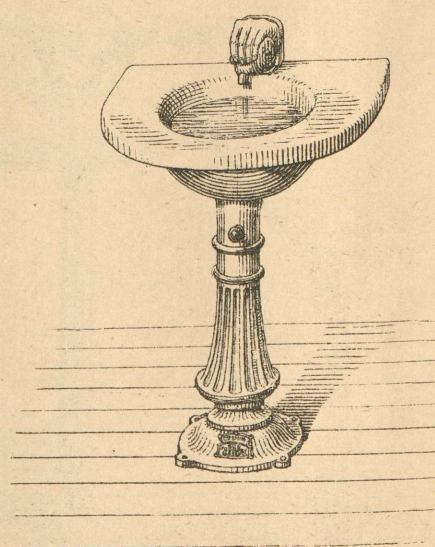
Nº 17 W.H. BASIN RANGE made in Ranges for any number of persons. Each basin is complete in itself, and is provided with supply and discharge valves, overflow, &c.; the whole being securely fitted together, and forming a very strong, compact, and perfect appliance.



Nº 20 WASH HAND BASIN.



Nº 3 CORNER WASH HAND BASIN.



Nº 23 WASH HAND BASIN.

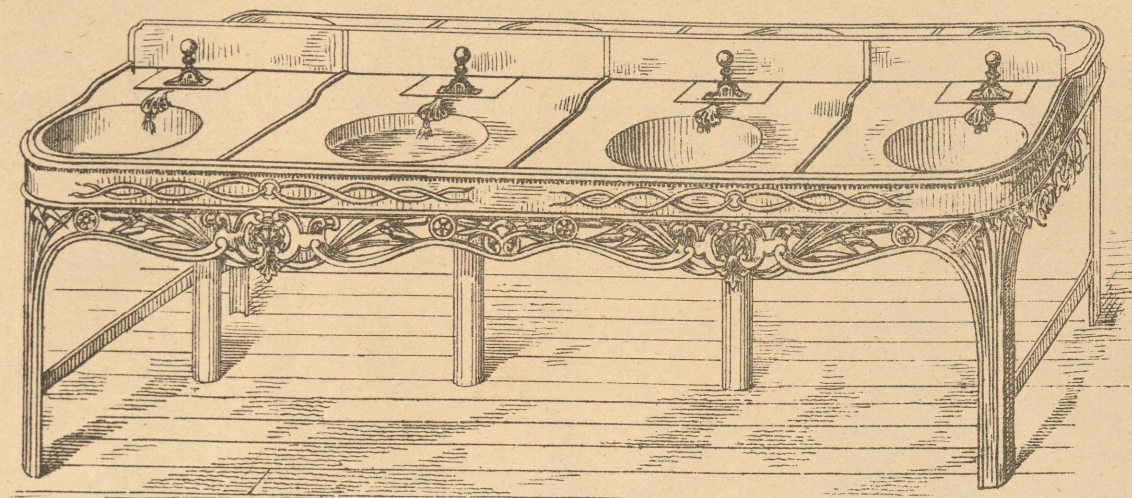
Nº 20 W.H. BASIN identical with No. 17 above, but made complete for one person. May be had painted or enamelled with Patent Metallic Enamel.

Nº 3 (CORNER) In every respect same as No. 3 above, but adapted to fit into a right-angled corner. A very convenient form, from the small space occupied by it. May be had painted or enamelled with Patent Metallic Enamel.

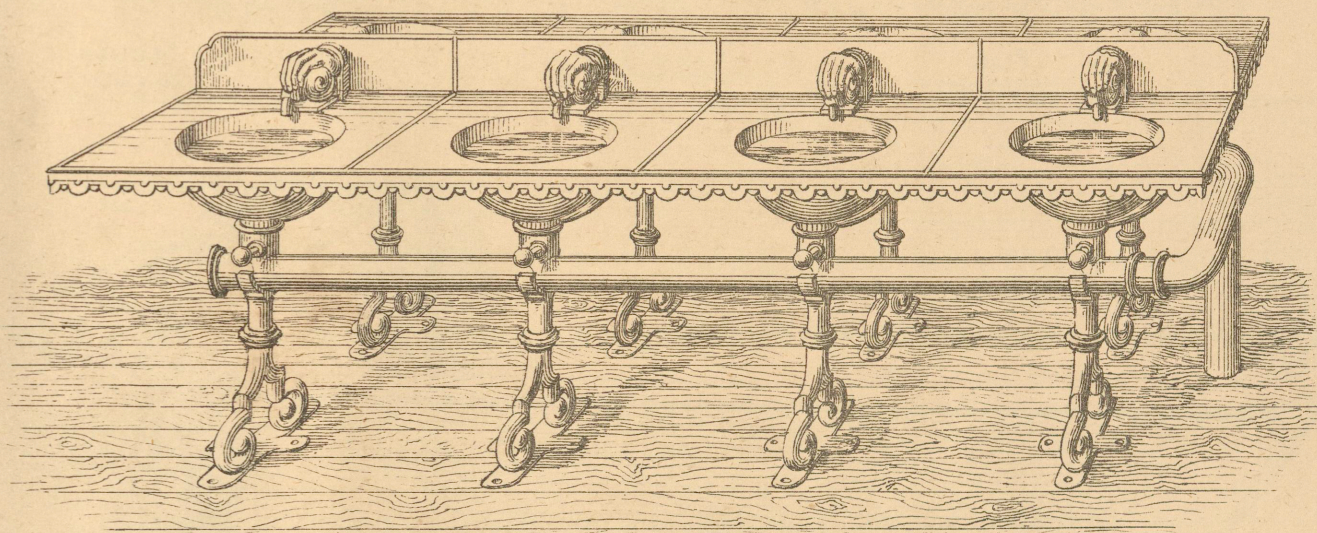
Nº 23 W.H. BASIN similar to No. 20 above, but having rounded corners is better adapted for standing in an isolated position. May be had painted, enamelled porcelain, or with Patent Metallic Enamel.

Either of these single W. H. Basins are recommended as very suitable for Teachers and others; as they are satisfactory in action, neat in appearance, and very strong and durable.

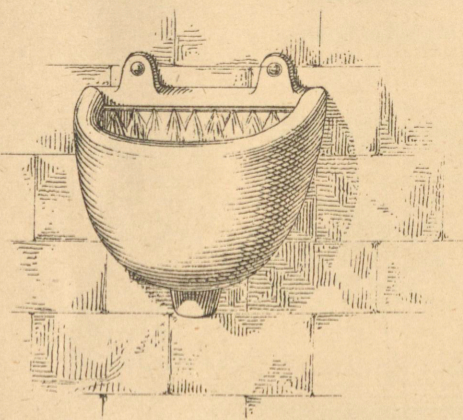
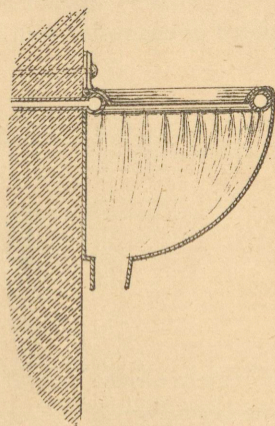
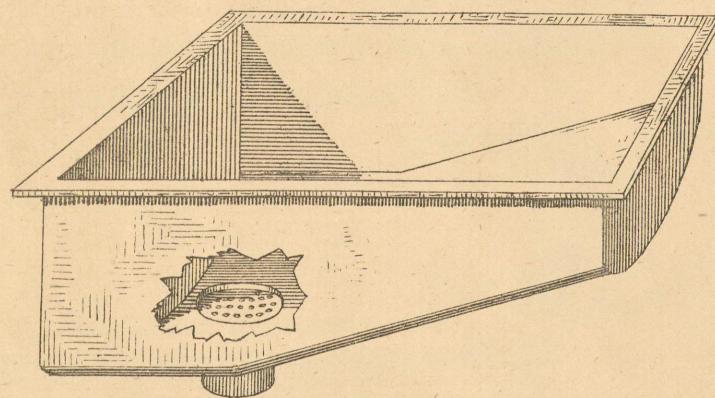


N<sup>o</sup> 22. DOUBLE WASH HAND BASIN RANGE FOR 8 PERSONS.

N<sup>o</sup> 22 W.H. RANGE is in its fittings; &c., identical with No. 3, and has all the special advantages of that very handsome Wash Hand Range. The basins are, however, placed back to back, so that the Range may be fixed in an isolated position. Can be had painted or enamelled with Patent Metallic Enamel, and is made in Ranges for any number of persons.

N<sup>o</sup> 18. DOUBLE WASH HAND BASIN RANGE FOR 8 PERSONS.

N<sup>o</sup> 18 is similar to No. 17 (see Plate 4) in regard to its fittings, &c., but like No. 22 above, is made to stand in an isolated position. Made in Ranges for any number of persons.

N<sup>o</sup> 14. SLOP BASIN.SECTION OF N<sup>o</sup> 14.N<sup>o</sup> 8. SLOP BASIN.

N<sup>o</sup> 14. SLOP BASIN A very useful article as receptacle for slops, &c., the basin being thoroughly flushed *on all sides* by means of a perforated pipe placed underneath the curved rim. May be had painted or enamelled with Patent Metallic Enamel.

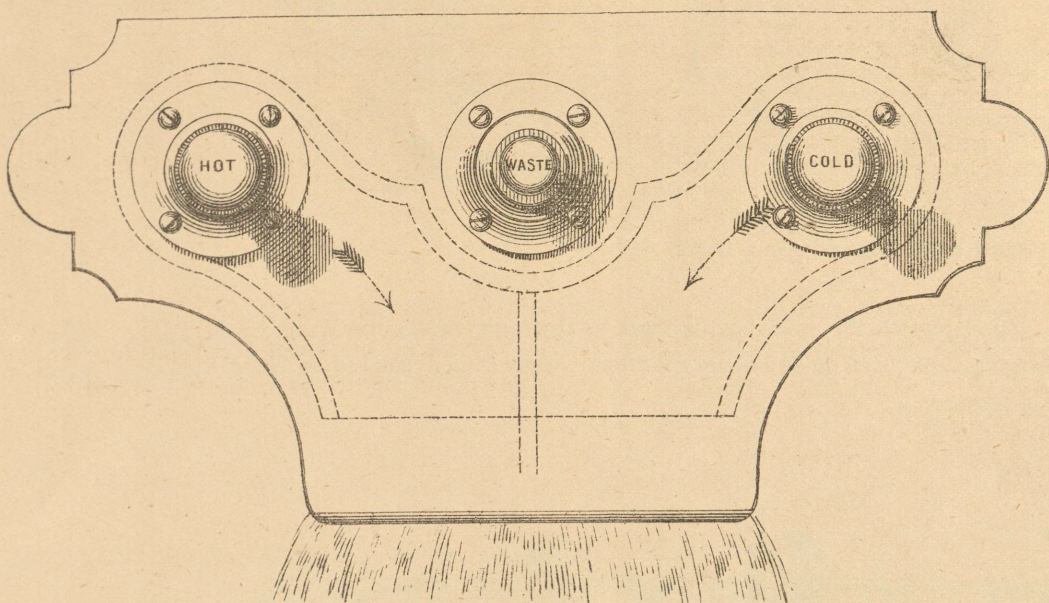
N<sup>o</sup> 8. SLOP BASIN A cleanly, durable, and cheap article for purposes similar to those served by No. 14 above. It is provided with chain-plug and overflow, and can be had painted or enamelled with Patent Metallic Enamel.



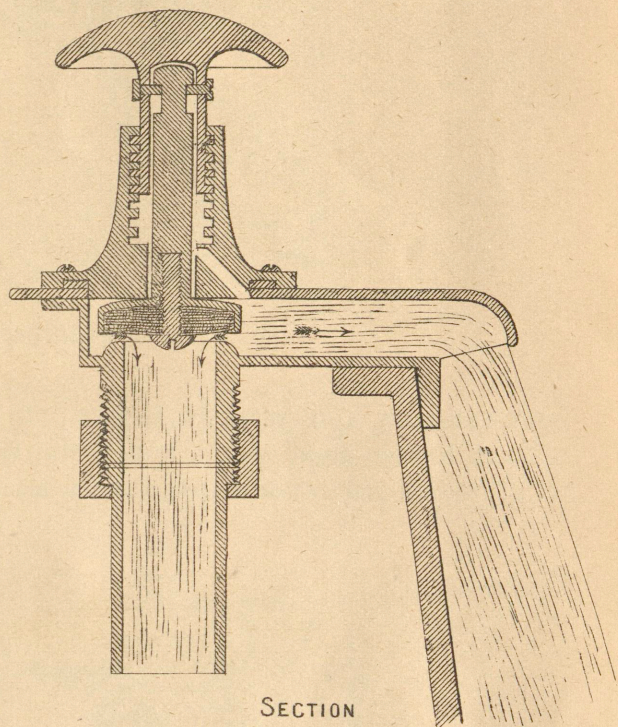
ABLUTIONARY APPLIANCES. (CONT'D) BATHS.

Special attention is invited to the *patent fittings* of these Baths (see half-size plan and section), which are confidently recommended for compactness and thorough efficiency. They dispense with stuffing-boxes (so objectionable when used in connection with *hot* water), discharge the water in the form of a *douche* over either end or side—a great improvement on the old mode of filling from below—and are in compliance with the rules of Water Companies, being perfect Waste Preventers, inasmuch as the discharge valve cannot be opened until the supply is closed, and *vice versa*.

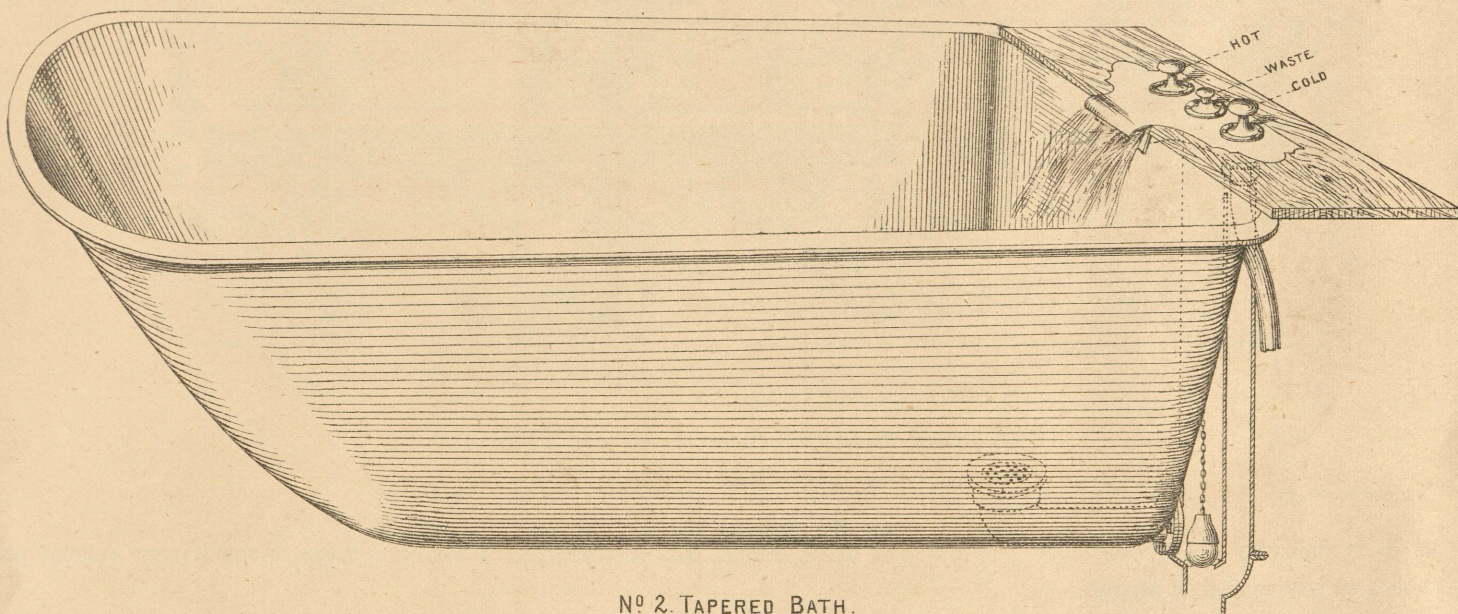
SUPPLY AND DISCHARGE GEARING.



PLAN.  
(HALF SIZE)



SECTION  
(HALF SIZE)



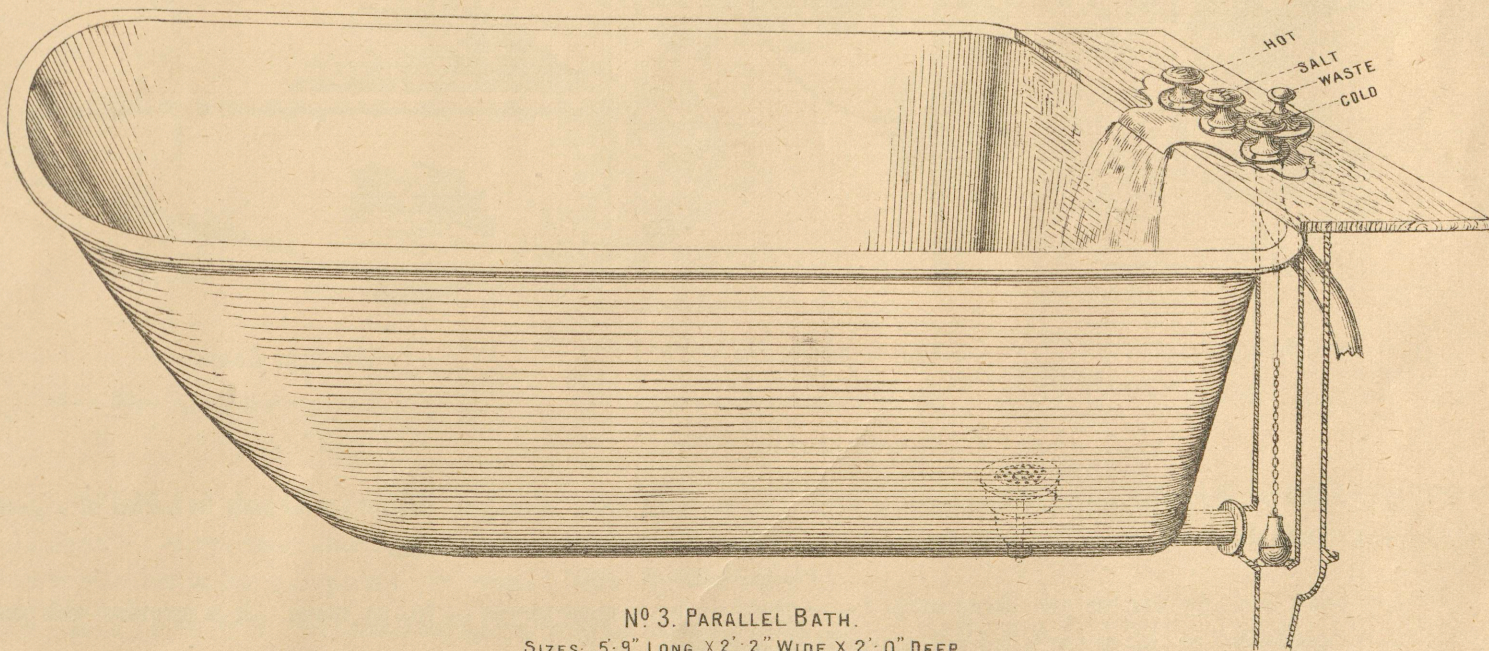
NO 2. TAPERED BATH.

SIZES. 5' 0" LONG X 1' 9" AND 2' 2 1/2" AT ENDS X 1' 7" DEEP.

5' 6" " X 2' 0" " 2' 5 1/2" " X 1' 8 1/2" "

6' 0" " X 2' 0" " 2' 5 1/2" " X 1' 10" "

Supplied either with or without gearing, and either painted or enamelled with Patent Metallic Enamel.



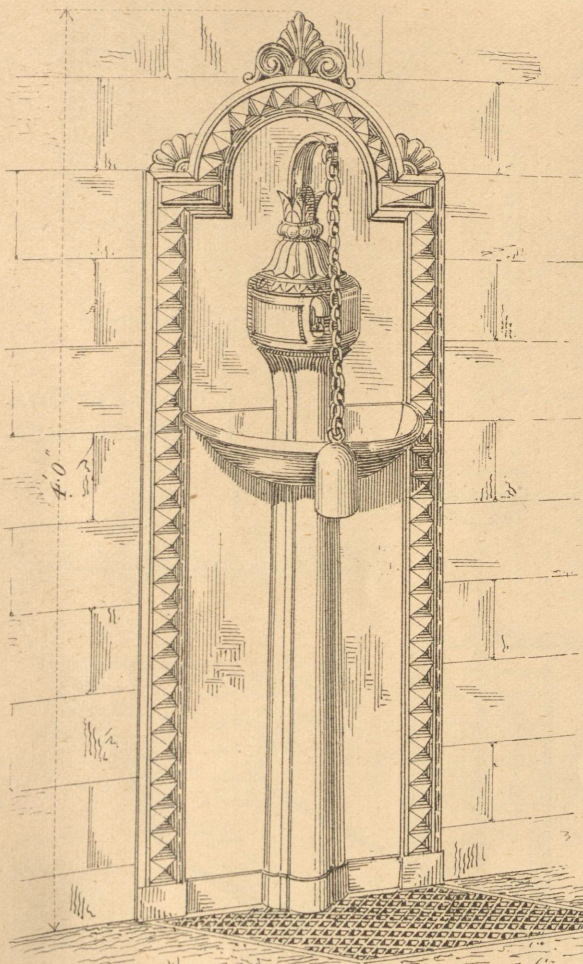
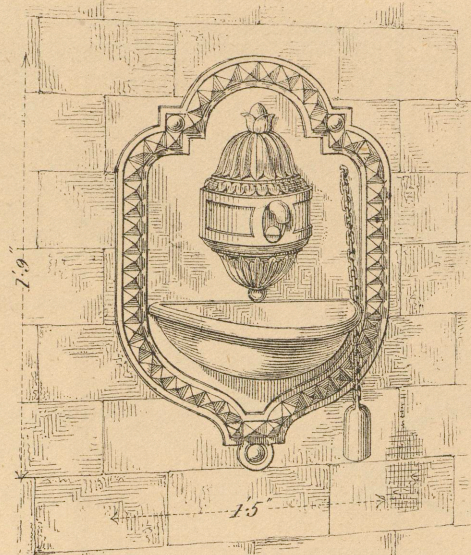
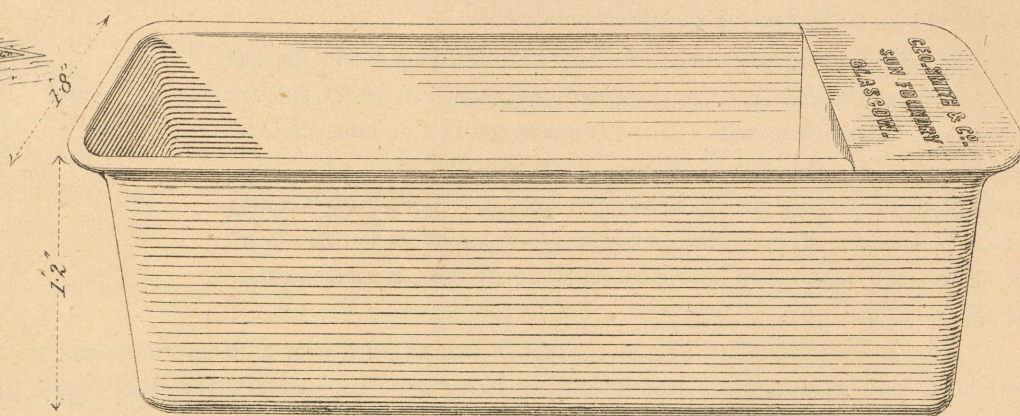
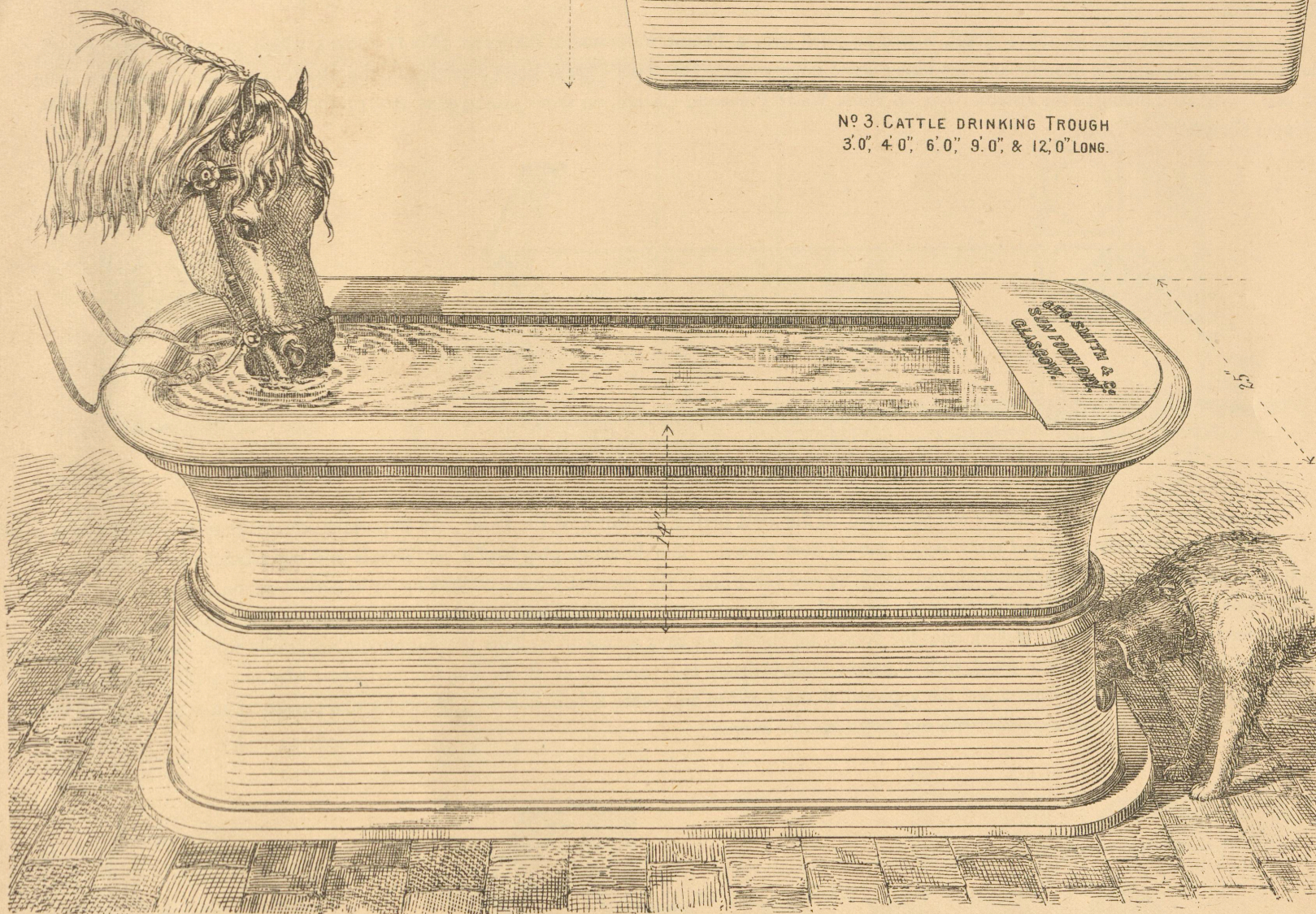
NO 3. PARALLEL BATH.

SIZES. 5' 9" LONG X 2' 2" WIDE X 2' 0" DEEP.

6' 0" " X 2' 2" " X 2' 0" "

Supplied either with or without gearing, and either painted or enamelled with Patent Metallic Enamel.



N<sup>o</sup> 25. WALL FOUNTAIN.N<sup>o</sup> 26. WALL FOUNTAIN.N<sup>o</sup> 3. CATTLE DRINKING TROUGH  
3' 0", 4' 0", 6' 0", 9' 0", & 12' 0" LONG.N<sup>o</sup> 6. CATTLE TROUGH  
4' 0", 5' 8", 9' 0" & 12' 0" LONG.

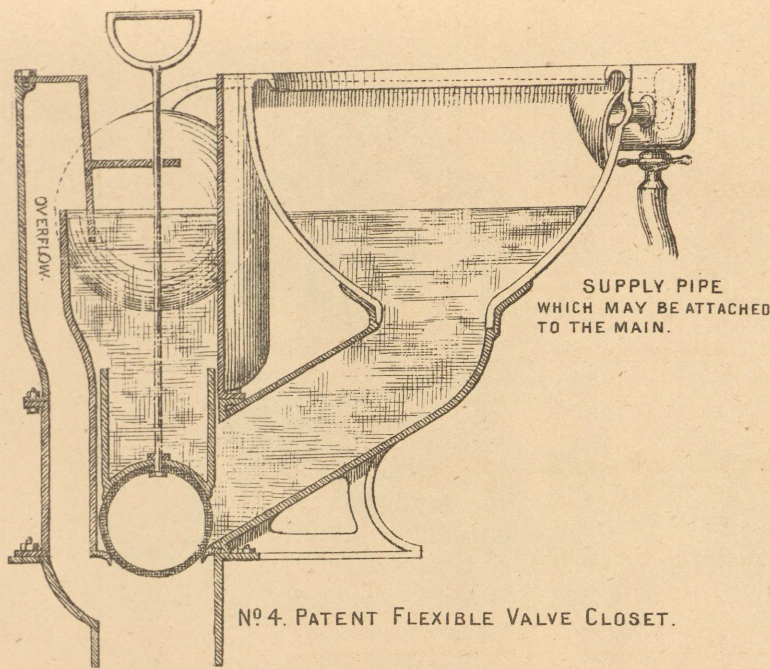
Above are furnished with self-acting valves, insuring a constant supply of fresh water, and No. 6. is supported on an iron base having a dog-trough at end, supplied by overflow from cattle-trough, the whole being complete and ready for attaching to the main.

THE DUBLIN SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS reports, that in *one hour in one day*, during the month of December, 1870, a time of year when they are not supposed to be required so much, no fewer than 1046 cattle, horses, and donkeys drank out of five of these troughs which had been erected by them there.

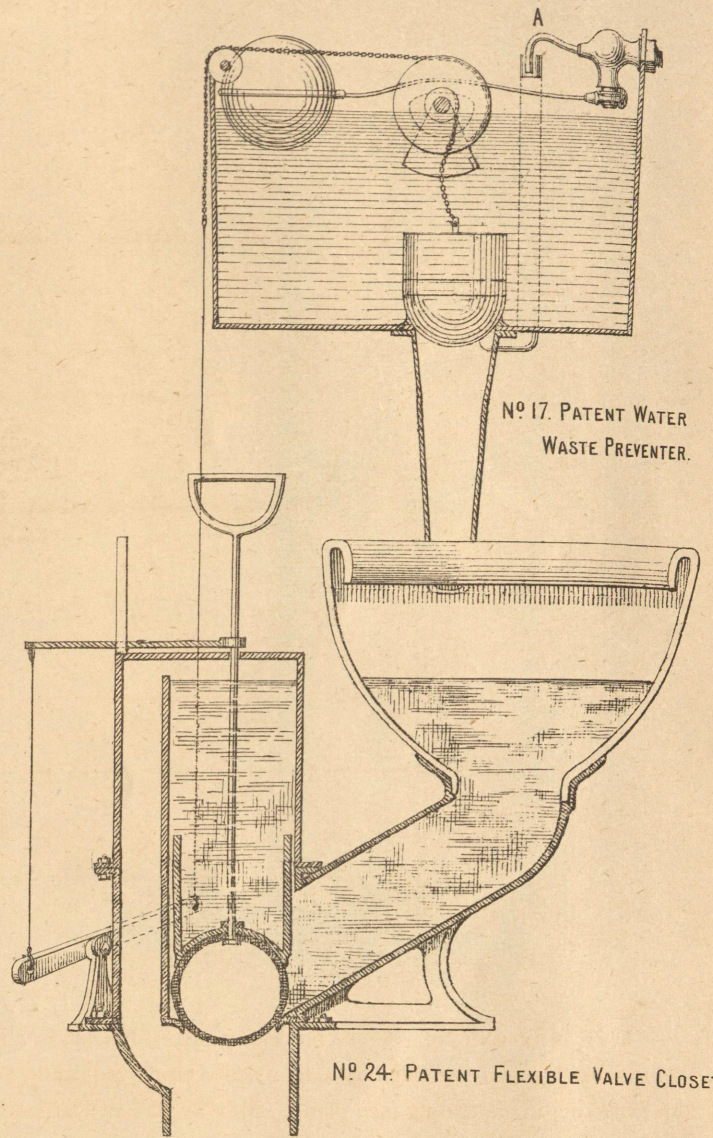
They have been largely supplied to HER MAJESTY'S WAR DEPARTMENT. Upwards of fifty have been erected in Glasgow, and large numbers have been supplied to the principal cities and towns in the kingdom, with like satisfactory results.



SANITARY APPLIANCES. — CLOSETS &C.



№ 4. PATENT FLEXIBLE VALVE CLOSET.

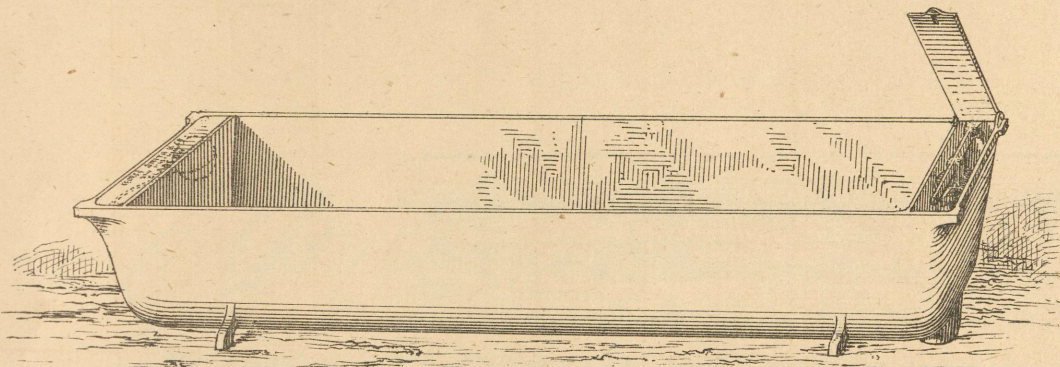


№ 24. PATENT FLEXIBLE VALVE CLOSET.

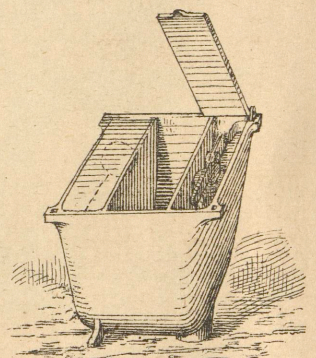
"THE LANCET" SANITARY COMMISSION on the state of LONDESBOROUGH LODGE, after the illness of H.R.H. the Prince of Wales, reports (9th December, 1871) regarding this closet, "*The situation very confined, but the condition of the closet excellent.*"

This closet (of which over 15,000 have been fitted up within the last few years), recommends itself, as compared with other closets, for efficient action and perfect cleanliness. It is so constructed that no impurities can accumulate about any of its parts, as it is thoroughly flushed when used, and immediately refilled with fresh water; thereby preventing the generating of any bad smell. The constant annoyance from impurities in other forms of closets, and consequent injury to health, are by this arrangement completely avoided.

No. 24, a modified form of above closet, is also supplied with a Patent Water-waste Preventer (No. 17 above), which gives an excellent flush, while correctly measuring the quantity and rendering waste impossible. The small pipe A gives a service to the Basin after the closet-handle is let down and during the refilling of the cistern. No. 18 Water Waste Preventer Cistern, on same principle as No. 17 above, is supplied for Pan, Valve, or Hopper Closets.

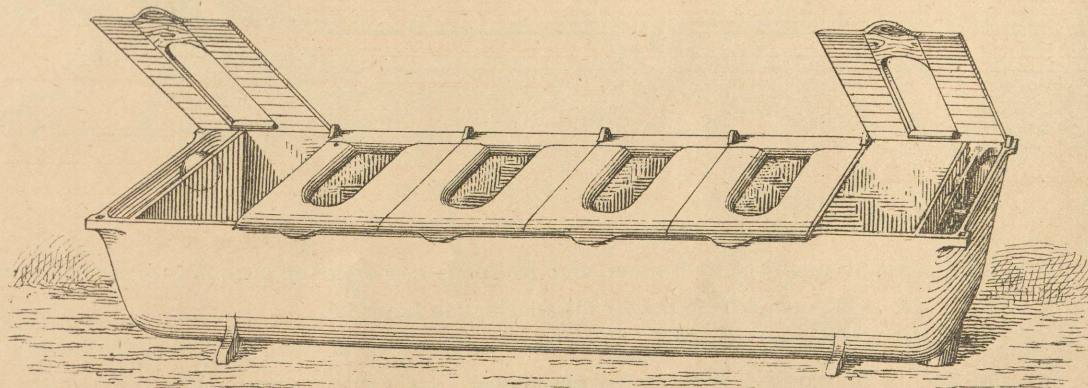


№ 25. WATER CLOSET RANGE FOR 6 PERSONS.

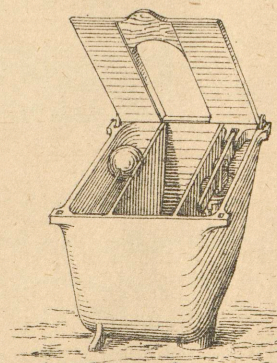


№ 25. WATER CLOSET FOR 1 PERSON.

Above Closet Range is confidently recommended as the most perfect appliance of the kind. An important advantage in it over all others is the complete isolation of the discharge and water supply gearing from the soil. The discharge plug is of a very simple and ingenious construction, combining, as it does, the properties of plug, bell-trap, and overflow; and this without the slightest chance of choking, or imperfect action of any kind. The result is, that when the plug is lifted, no syphon being required, an immediate and direct communication takes place between the trough and the sewer. As the discharge gearing is securely locked, only the person appointed can have access to it; thus preventing the apparatus from being tampered with. The water supply compartment is fitted with a patent High-pressure Ball-valve, which is the simplest and most efficient made. These and other advantages have obtained for this closet the approval of the London and other School-boards. Made for one person or in ranges for any required number, and can be supplied enamelled with our patent metallic enamel.



№ 26. WATER CLOSET RANGE FOR 6 PERSONS.

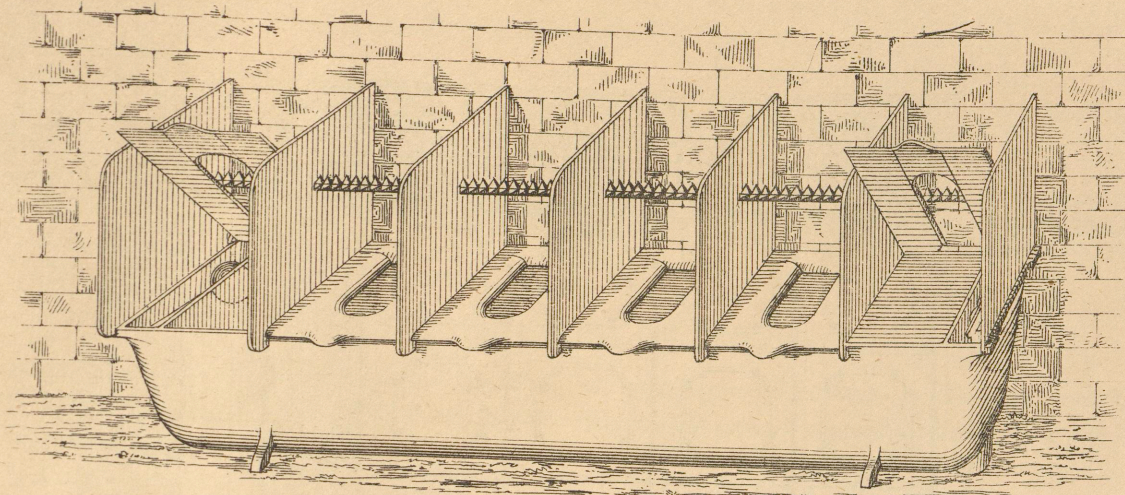


№ 26. WATER CLOSET FOR 1 PERSON.

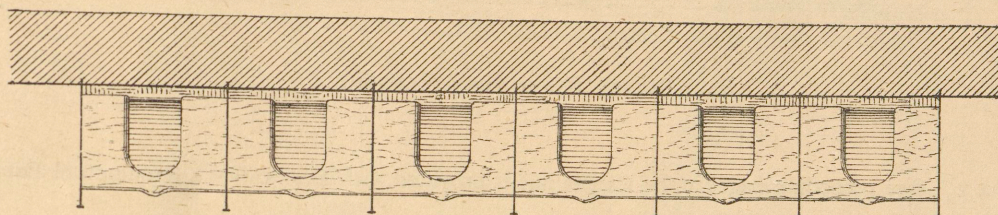
No. 26 is same as No. 25 above, but is provided, in addition, with seats. These are of wood on top and iron below, and are hinged to the trough; so that, when required, access can be obtained to any part of the range. The seats are of the usual width, viz. 2 ft., but any other size can be made to order.



## SANITARY APPLIANCES;—CLOSETS.(CONT'D)

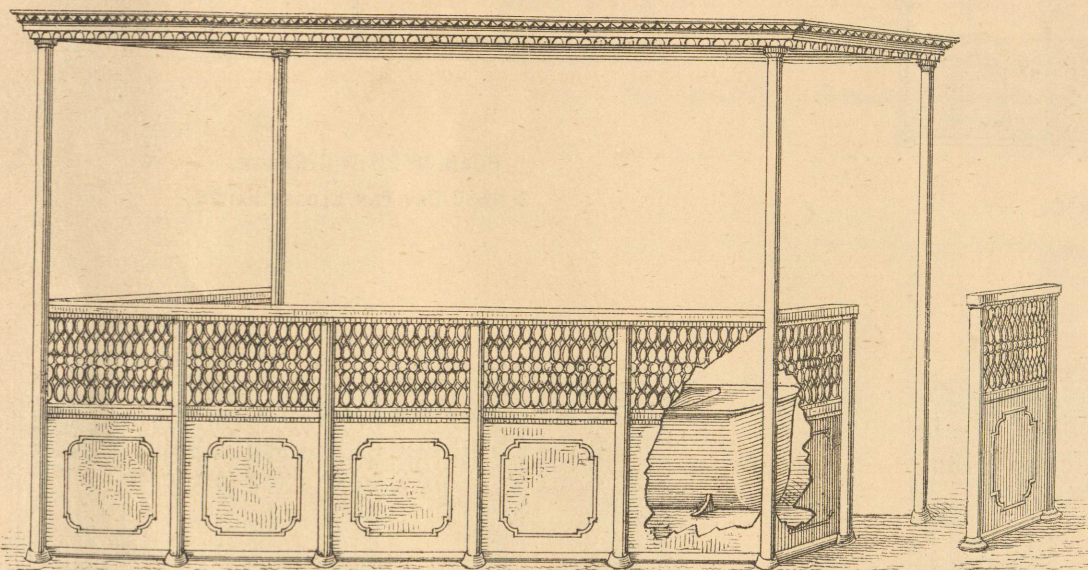


Nº 27. WATER CLOSET RANGE FOR 6 PERSONS.

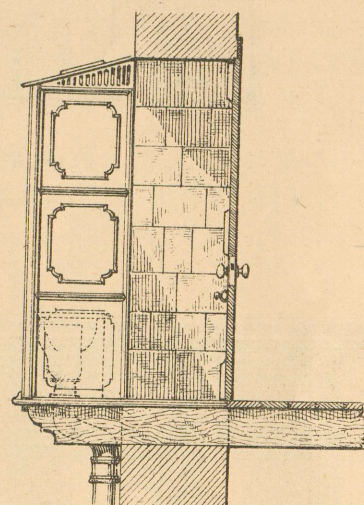
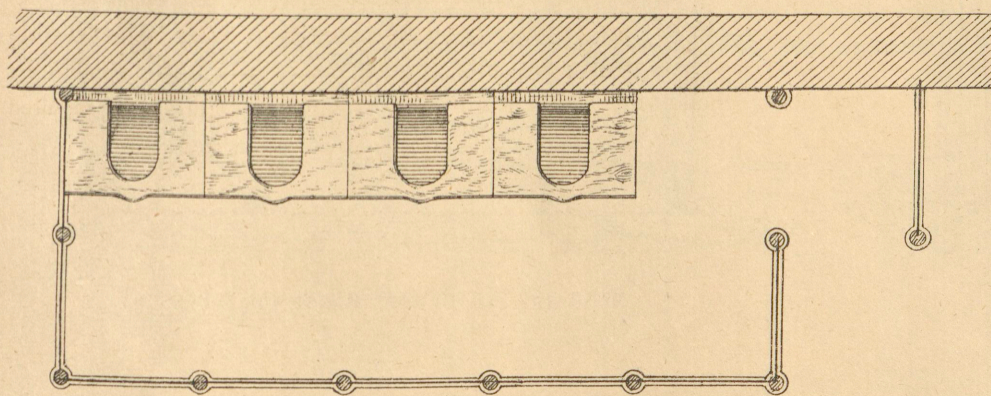


PLAN OF Nº 27.

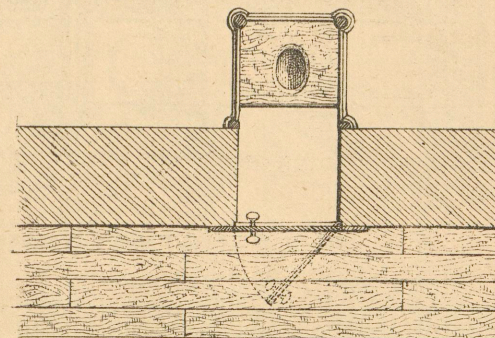
Nº 27 is same as No. 26 (see preceding page), having, in addition, divisions between the seats. It is also provided with a Back-guard, which is a great improvement on the boarding usually employed, and *effectually* prevents abuse of the seat, without harbouring any effluvia. A very useful form for fixing in a Building (see plan) May be had in Ranges for any number of persons.



Nº 31. WATER CLOSET RANGE FOR 4 PERSONS

Nº 22. WATER CLOSET.  
FOR WORKMEN'S DWELLINGS &c

PLAN OF Nº 31.

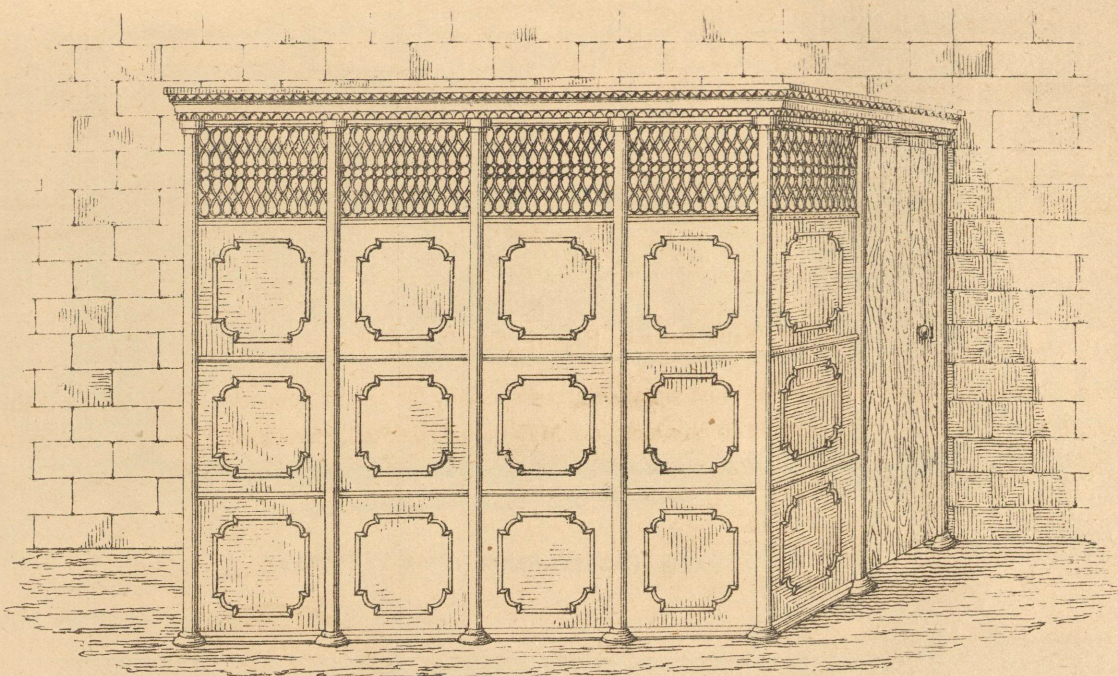


PLAN OF Nº 22.

Nº 31. is a form of Closet Range which has been highly approved for Schools, Workshops, &c. The Range (which is same as No. 26 ) is enclosed by an ornamental screen, and provided with pillars and roof having ornamental cornice-gutter. The screen, while high enough to give privacy, is yet sufficiently open to prevent loitering or any abuse of the closet. May be had in Ranges for any number of persons. (See Plan)  
Nº 22. WATER CLOSET, This Closet is specially constructed for economising space in schools, workmen's dwellings, factories, &c. It keeps the passages perfectly free from smell, as it is projected outside the building, from each floor, and fitted with No. 4 Patent Flexible Valve Closet. (See Plate 8.)

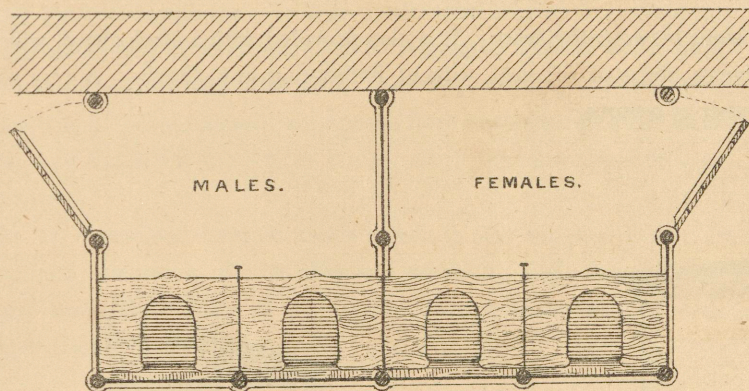


SANITARY APPLIANCES;—CLOSETS. (CONT'D)

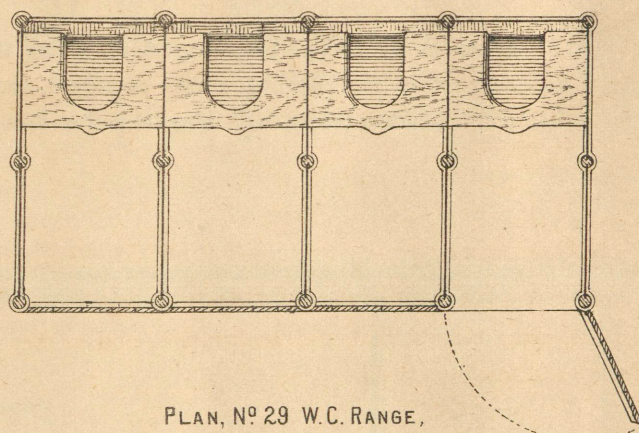


Nº 28 CLOSET RANGE FOR 4 PERSONS.

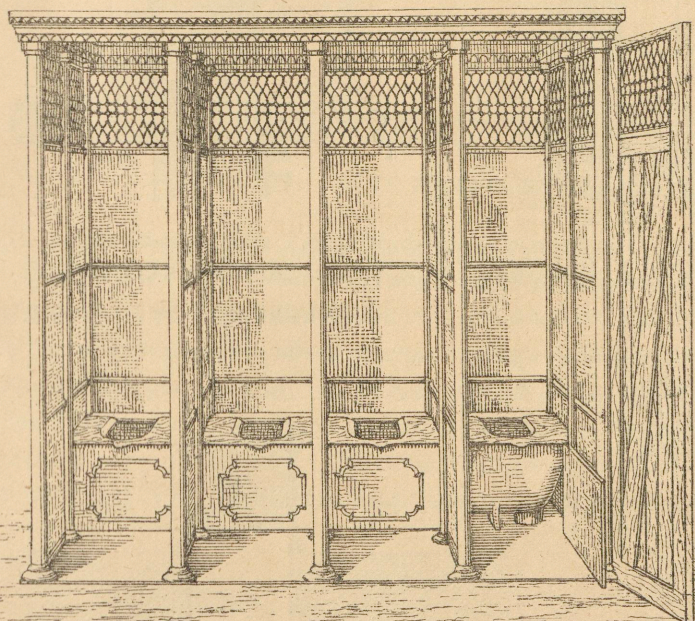
Nº 28 is similar to No. 27 (see preceding page) in the Range, but is provided with Doors, Walls, Ornamental Panels; and Roof, and has separate doors for the sexes. See plan.



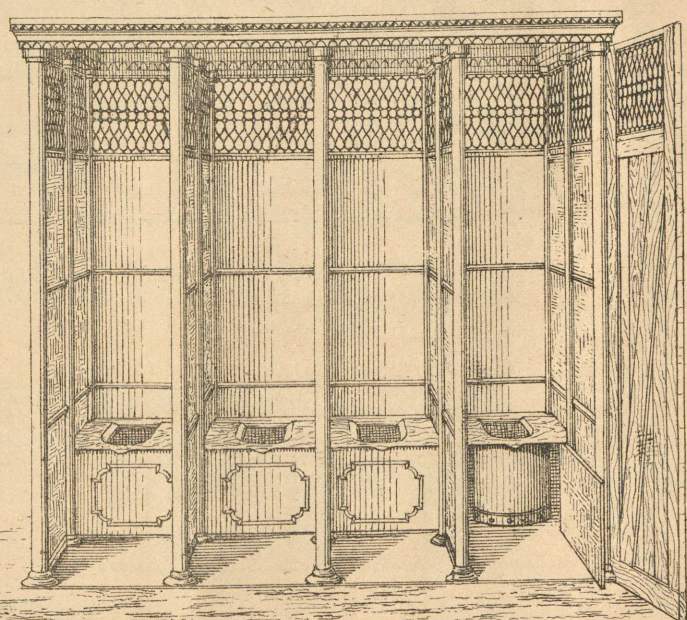
PLAN, Nº 28 W.C. RANGE.



PLAN, Nº 29 W.C. RANGE,  
& Nº 30 DRY PAN CLOSET RANGE.



Nº 29. W.C. RANGE FOR 4 PERSONS.



Nº 30 DRY PAN CLOSET RANGE FOR 4 PERSONS.

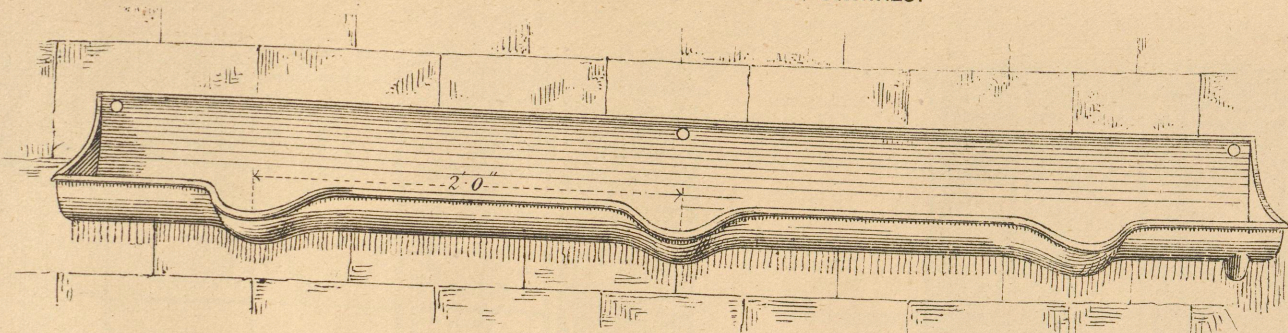
Nº 29 is similar to No. 26 (see preceding page), but in addition is provided with Partitions, Doors with Inside Bolts, Backs, Ornamental Panel Gratings, and Roof. See plan above.

Nº 30 is similar in plan to No. 29, but is suitable where absence of regular water-supply and sewers would render the latter unsuitable. The ordure is received in a large galvanized pan, which is inclosed, underneath the seat, by a hinged door, whence it is readily removed periodically, by the person appointed. The cost is soon repaid by the value of the manure which is thus collected and utilized.

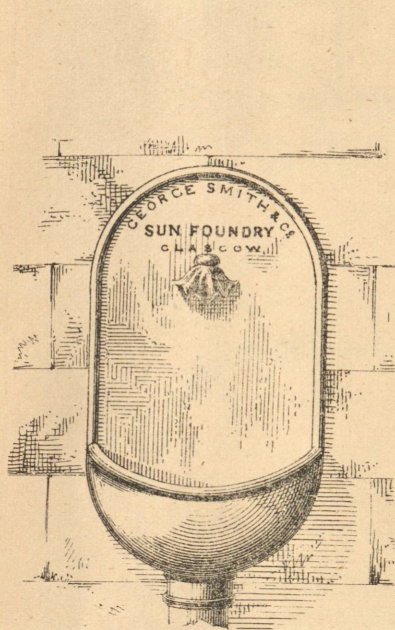
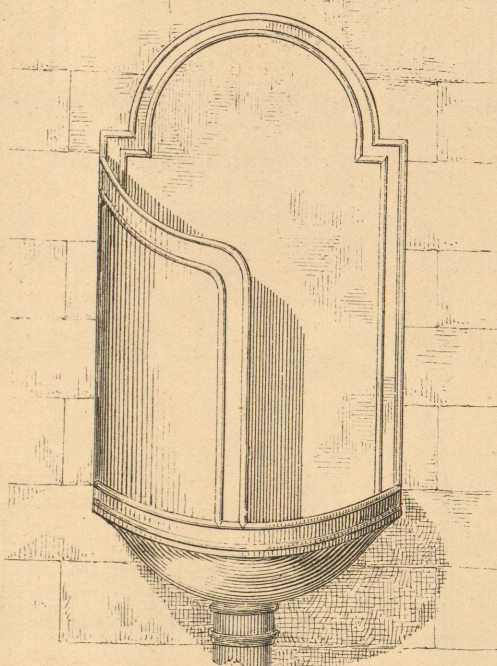
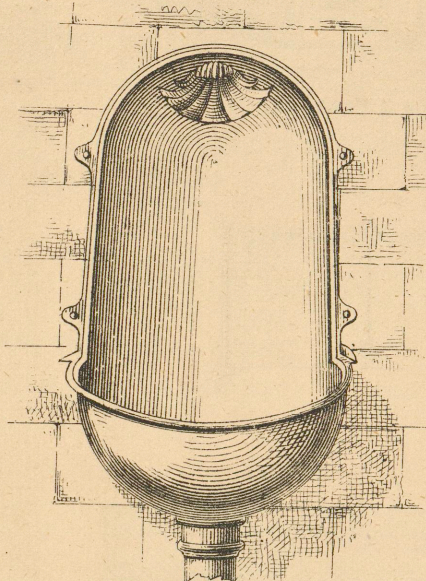
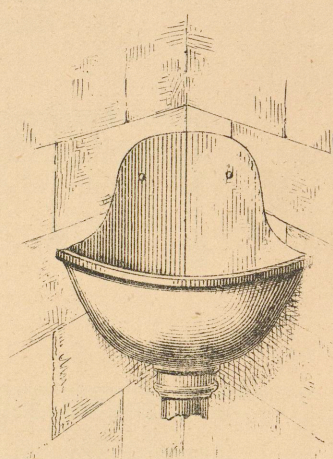
NOTE.—These Closets are made in Ranges, for any number of persons, and in almost endless variety of arrangement, either by themselves or combined with Urinals. For plan-suggestions of various combinations suitable for Schools, &c., see plate 13.



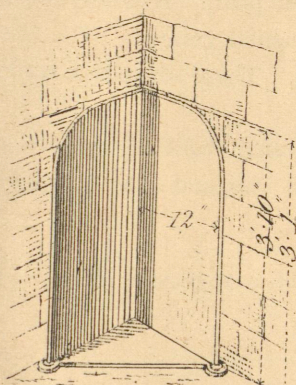
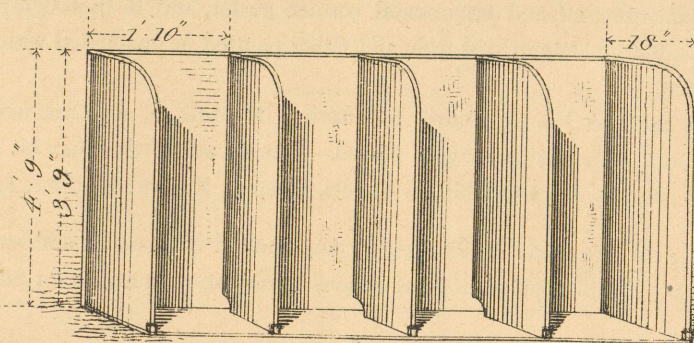
## SANITARY APPLIANCES: (CONTINUED) URINALS.

N<sup>o</sup> 24. WALL URINAL RANGE FOR 3 PERSONS.

A simple and economical form of Urinal, suitable for most situations, but specially for Infant Schools. They can be easily adjusted at any height on a wall, with a fall towards the outlet, and can be made to any length. May be had painted, enamelled Porcelain, or with Patent Metallic Enamel.

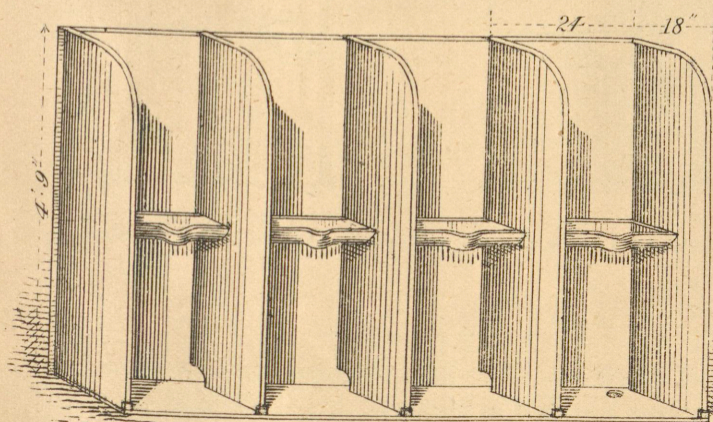
N<sup>o</sup> 23. WALL URINAL.N<sup>o</sup> 31. WALL URINAL.N<sup>o</sup> 17. CRADLE URINAL.N<sup>o</sup> 16. CORNER URINAL.

Above represent another class of Urinals, of which there is a large variety. They are very suitable for situations where only a limited space is available, being cleanly, neat, and unobtrusive; and as they can be had enamelled Porcelain, and with a flushing water supply, they are perfectly inoffensive and free from smell.

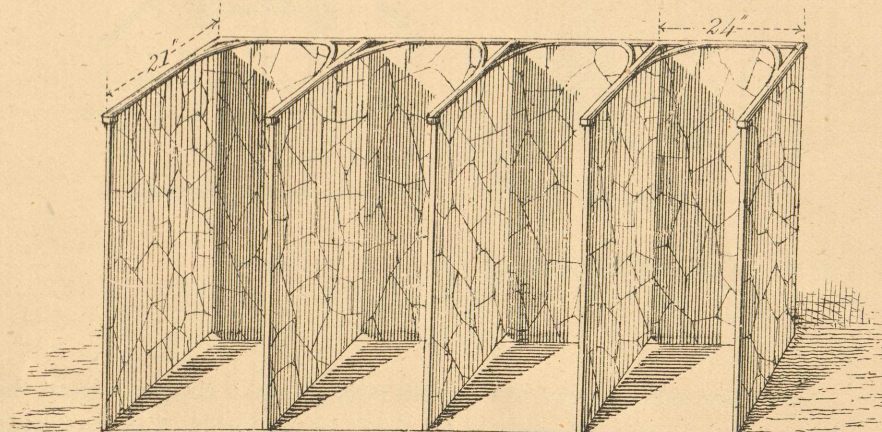
25. CORNER URINAL  
3' 1" AND 3' 10" HIGH.N<sup>o</sup> 18. URINAL RANGE FOR 4 PERSONS.  
3' 9" X 1' 10", 4' 9" X 2' 0".

N<sup>o</sup> 25. CORNER URINAL, is a very useful Urinal, occupying, as it does, almost no room whatever, yet preserving the building against which it may be placed. It is very durable, being of cast iron, and may be had painted or enamelled with Patent Metallic Enamel.

N<sup>o</sup> 18. URINAL RANGE. The smaller size is very suitable for Infant Schools, while the larger is better adapted for the more advanced. They are cleanly and strong, being constructed wholly of cast iron, and when provided with our No 1 syphon trap, they are perfectly inoffensive.

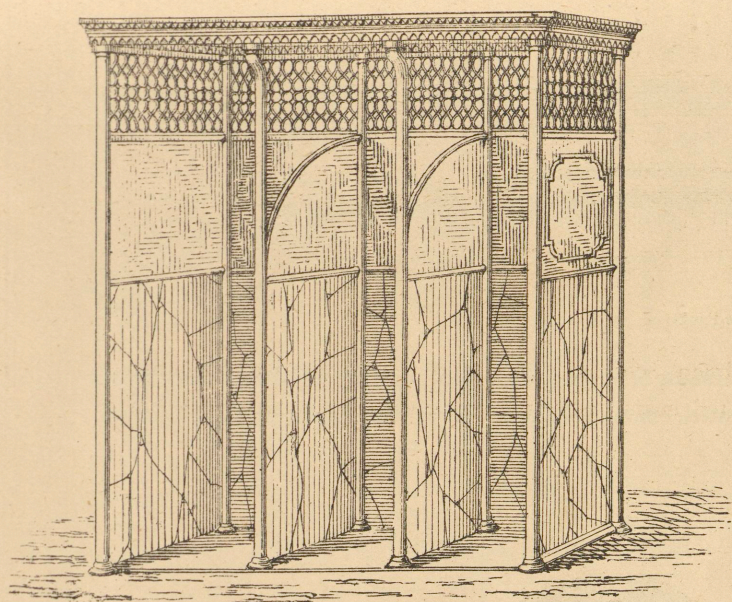
N<sup>o</sup> 27. URINAL RANGE FOR 4 PERSONS  
4' 9" X 2' 0"

N<sup>o</sup> 27. URINAL RANGE is same as No. 18 but is provided with a trough at back. Either of these Ranges may be had painted or enamelled with Patent Metallic Enamel.

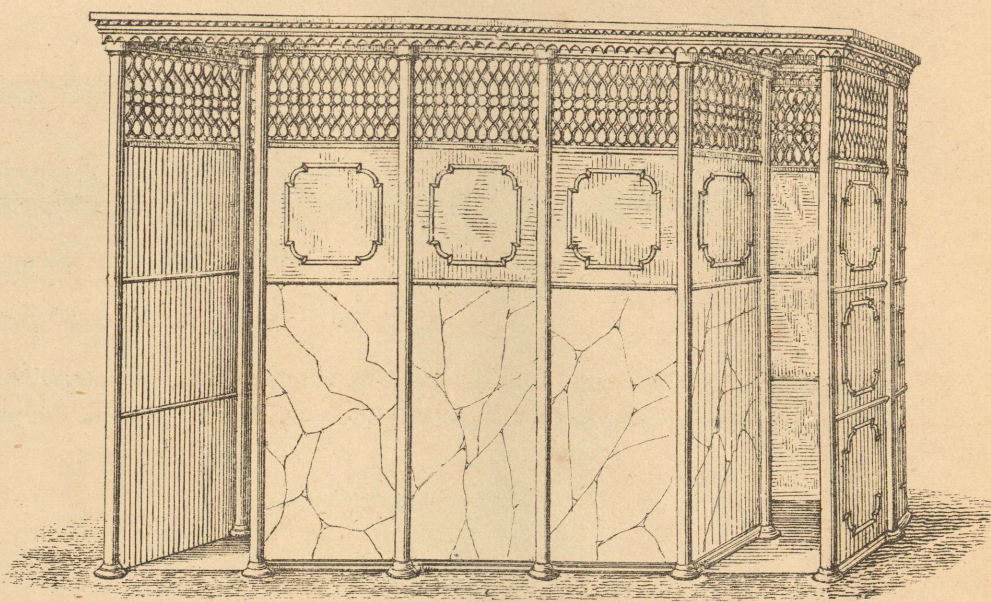
N<sup>o</sup> 21. URINAL RANGE FOR 4 PERSONS.  
4' 0" 5' 0" & 6' 0" HIGH.

N<sup>o</sup> 21. A first-class Urinal Range, suitable for Schools, Hotels, Railway Stations, &c. The backs and partitions are slate, but the Range can be fitted with opaque glass, or with our patent enamelled slate, *to order*. The whole is securely fitted together with cast-iron coping; forming a very cleanly and durable Range. Supplied with or without cast-iron sole-plate.

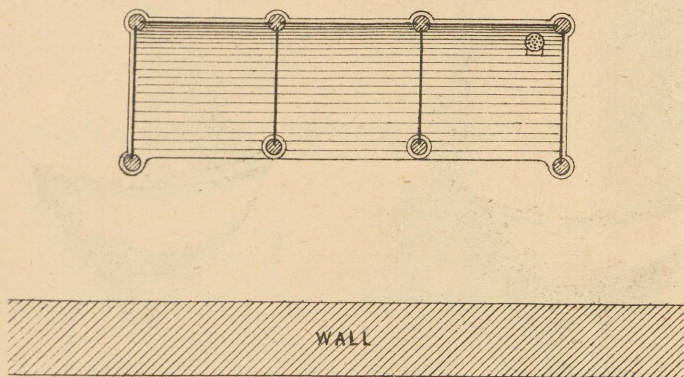




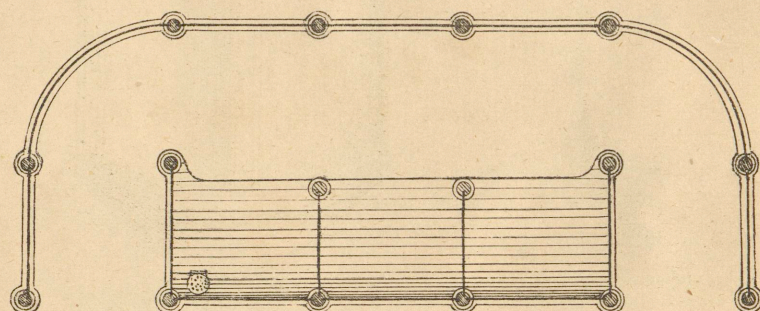
Nº 29. URINAL RANGE FOR 3 PERSONS.



Nº 30. URINAL RANGE FOR 3 PERSONS.



PLAN OF Nº 29.

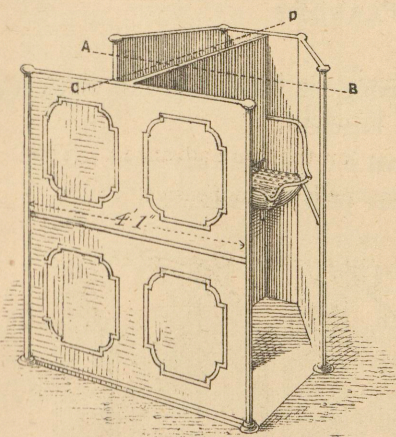


PLAN OF Nº 30.

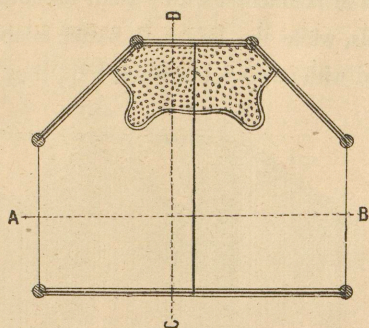
Nº 29, Is a Range specially suitable for Schools, Streets, &c., where advantage can be taken of a wall as screen, (see plan). It is neat and unobtrusive in appearance, is provided with roof and ornamental cornice gutter, and is thoroughly ventilated by the ornamental gratings. The backs, divisions, and sides may be had either in slate or cast iron, and either painted or enamelled with Patent Metallic Enamel. These advantages render this Range a most perfect appliance.

Nº 30 Is in all respects same as No. 29 above, but having in addition, an Ornamental Screen entirely inclosing the Urinal, and insuring perfect privacy in whatever situation the Range may be placed. The urinal portion may be had either in slate or cast iron, and either painted or enamelled with Patent Metallic Enamel. Very suitable for Streets, Squares, Railway Stations, &c.

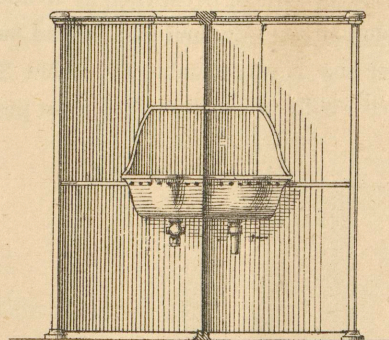
NOTE.—These Urinals are made in Ranges, for any number of persons, and in almost endless variety of arrangement, either by themselves or combined with Closets. For plan-suggestions of various combinations suitable for Schools, &c., see plate 13.



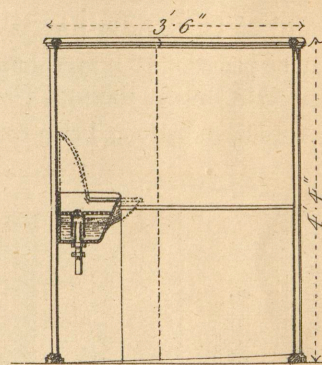
Nº 20, URINAL FOR 2 PERSONS.



PLAN



SECTION ON LINE A.B.



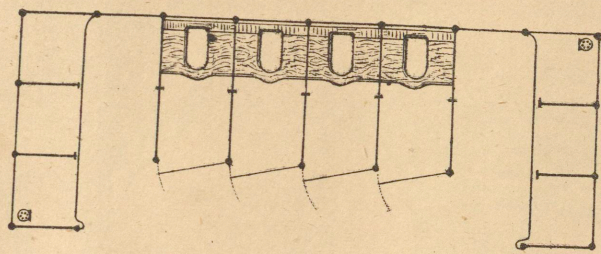
SECTION ON LINE C.D.

Constructed on a new and ingenious principle which entirely prevents the emission of any effluvia. This important consideration is accomplished by means of paraffin oil, which, to the depth of two inches, floats on the surface of the water contained in the basin. Any addition to the contents immediately causes an overflow to the same extent, and as the overflow pipe is covered with a bell trap which sinks into the water and is surrounded by the oil, perfect freedom from smell is insured. See sections above.

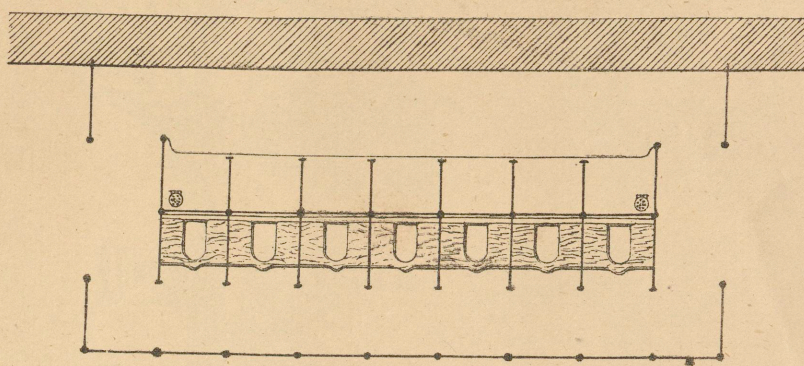
They are thus very suitable for erection within doors, and in factories can be fitted on different flats, thus obviating the waste of time occasioned by men leaving the workshops. The well-known engineering establishment of Messrs John Elder & Co., and many other factories, have been fitted up in this way with satisfactory results. Their perfect inoffensiveness renders them also very suitable for schools, as they can be erected in any part of the playground without interfering with the amenities of the schoolhouse or playground.



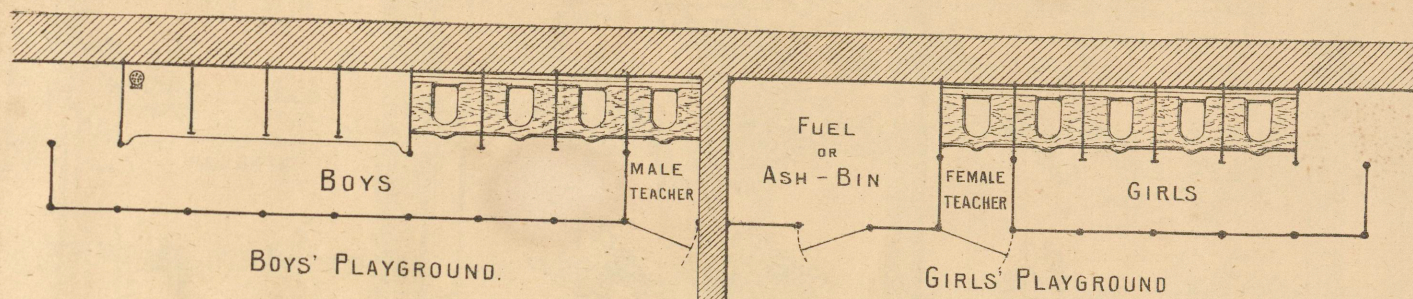
PLAN SUGGESTIONS, FOR CLOSETS, URINALS &amp;c.



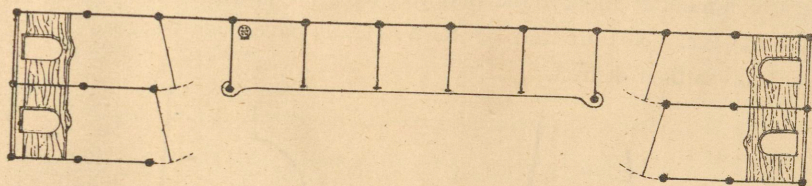
PLAN No. 1. 4 CLOSETS &amp; 6 URINALS.



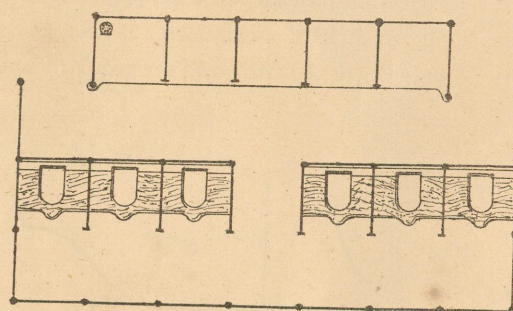
PLAN No. 2. 7 CLOSETS AND 7 URINALS.



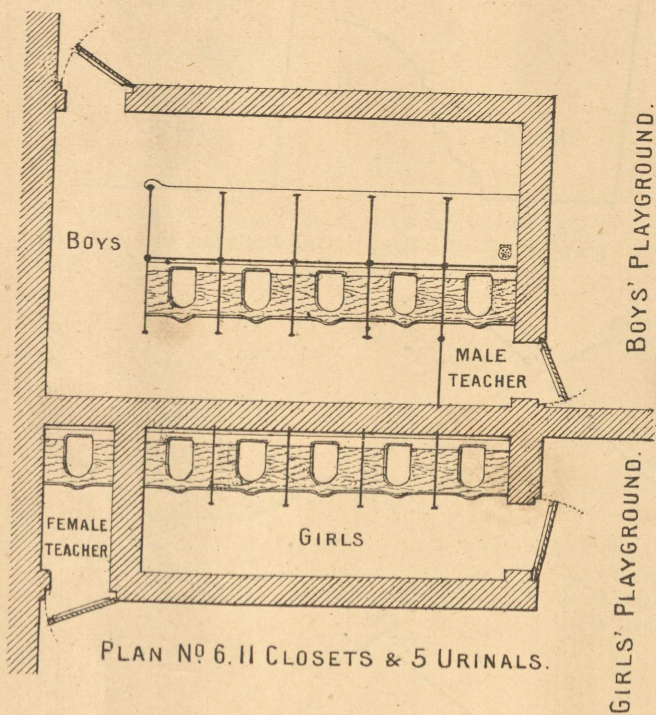
PLAN No. 3. 9 CLOSETS, 4 URINALS, & ASH-BIN OR FUEL HOUSE.  
 AN "OBSTACLE TO SOUND AS WELL AS SIGHT," AS RECOMMENDED BY THE COMMITTEE OF COUNCIL ON EDUCATION.



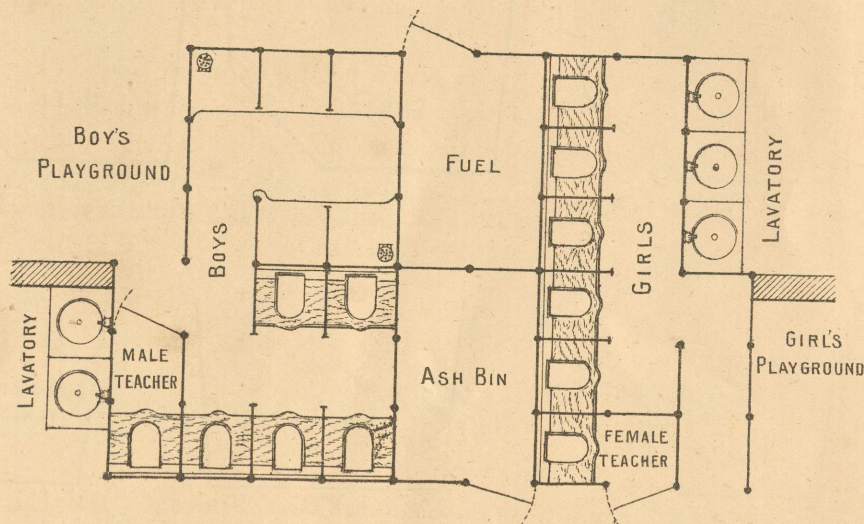
PLAN No. 4. 4 CLOSETS &amp; 5 URINALS.



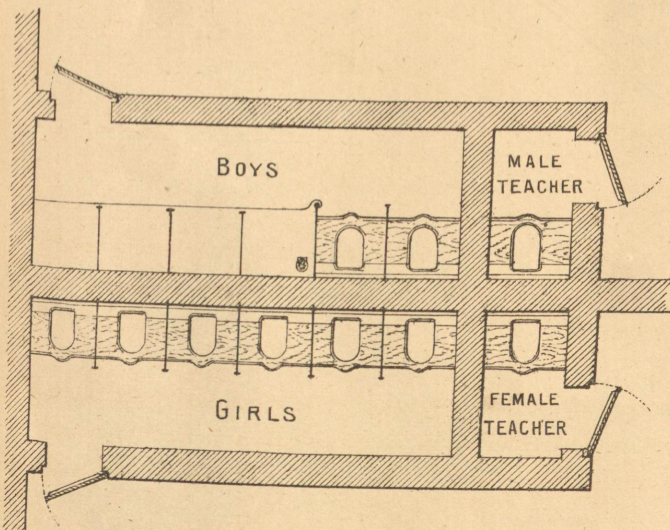
PLAN No. 5. 6 CLOSETS &amp; 5 URINALS.



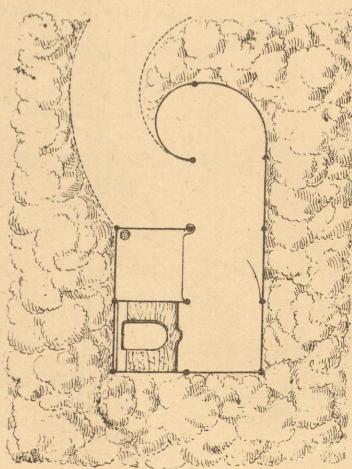
PLAN No. 6. 11 CLOSETS &amp; 5 URINALS.



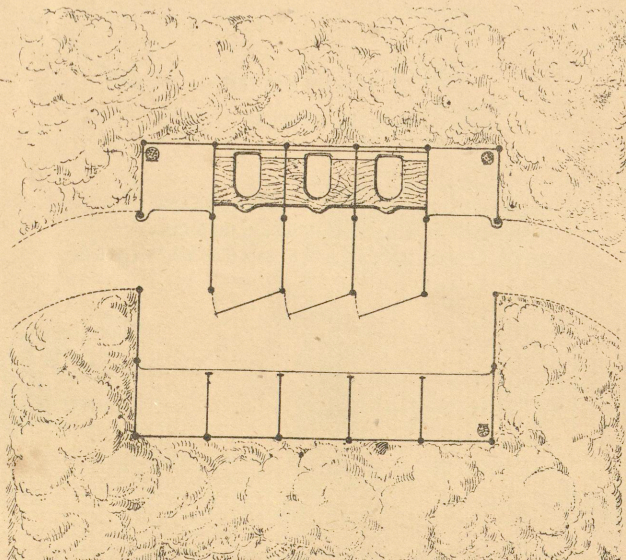
PLAN No. 7. 12 CLOSETS, 5 URINALS, 5 W.H. BASINS,  
 ASH-BIN & FUEL HOUSE, AS RECOMMENDED BY THE COMMITTEE  
 OF COUNCIL ON EDUCATION.



PLAN No. 8. 10 CLOSETS, &amp; 4 URINALS.



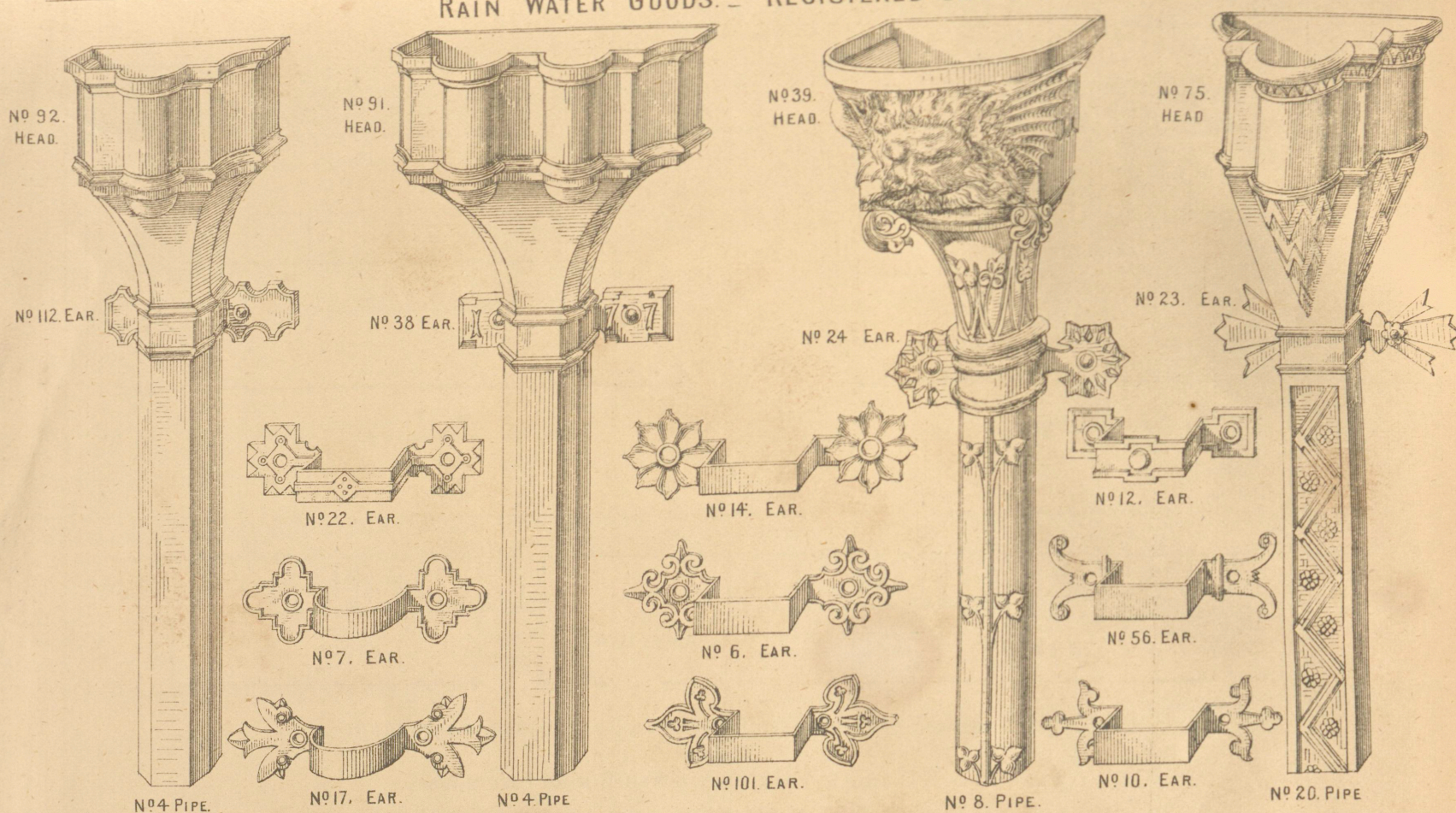
PLAN No. 9. 1 CLOSET &amp; 1 URINAL.



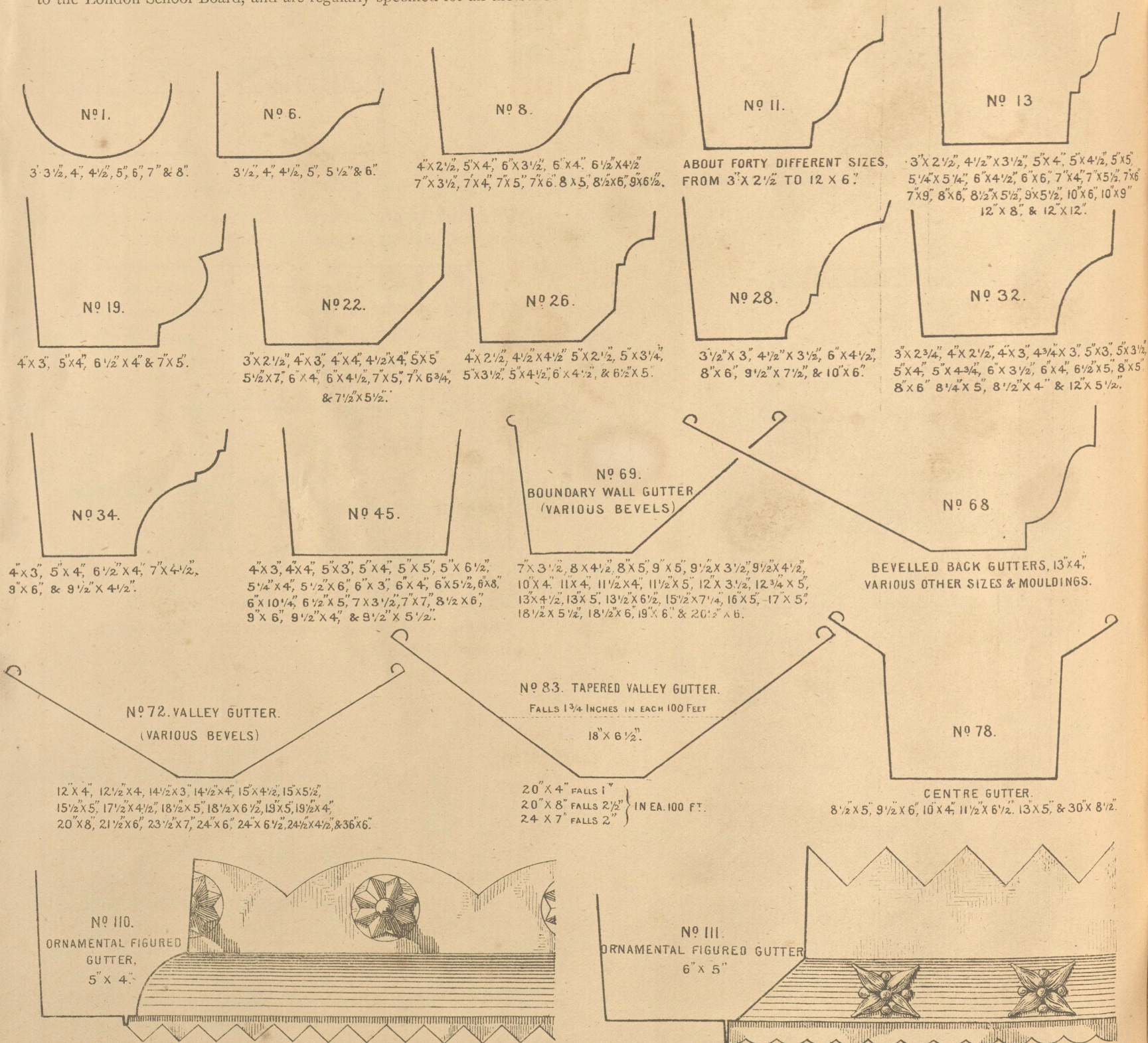
PLAN No. 10. 3 CLOSETS, &amp; 7 URINALS.



RAIN WATER GOODS. - REGISTERED DESIGNS.



This page illustrates a few examples of our Rain-water Goods, which number about three hundred different patterns. These embrace designs suitable for any style of architecture, as also, any requirement of position, &c. Nos. 91 and 92 R. W. Heads have been designed by the architect to the London School Board, and are regularly specified for all the schools in their district.





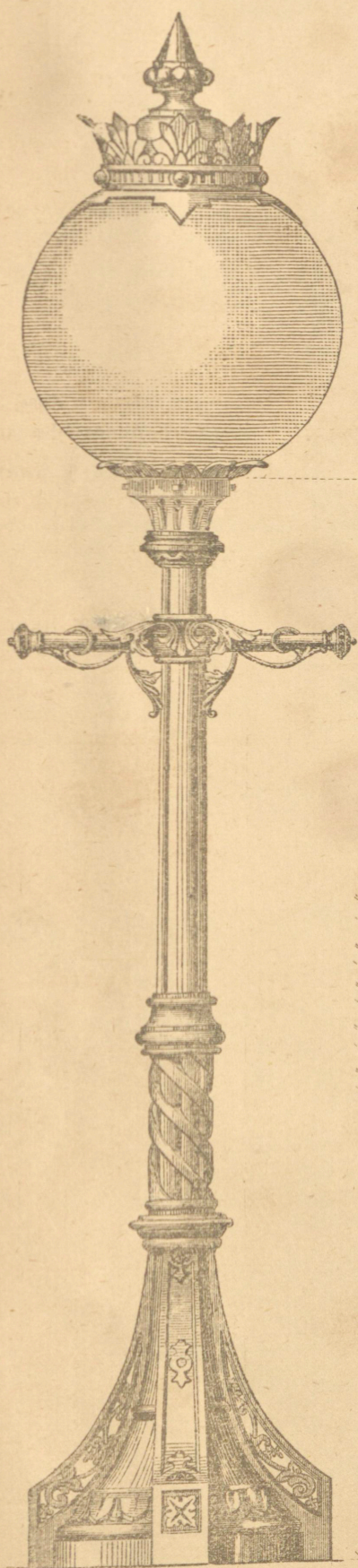
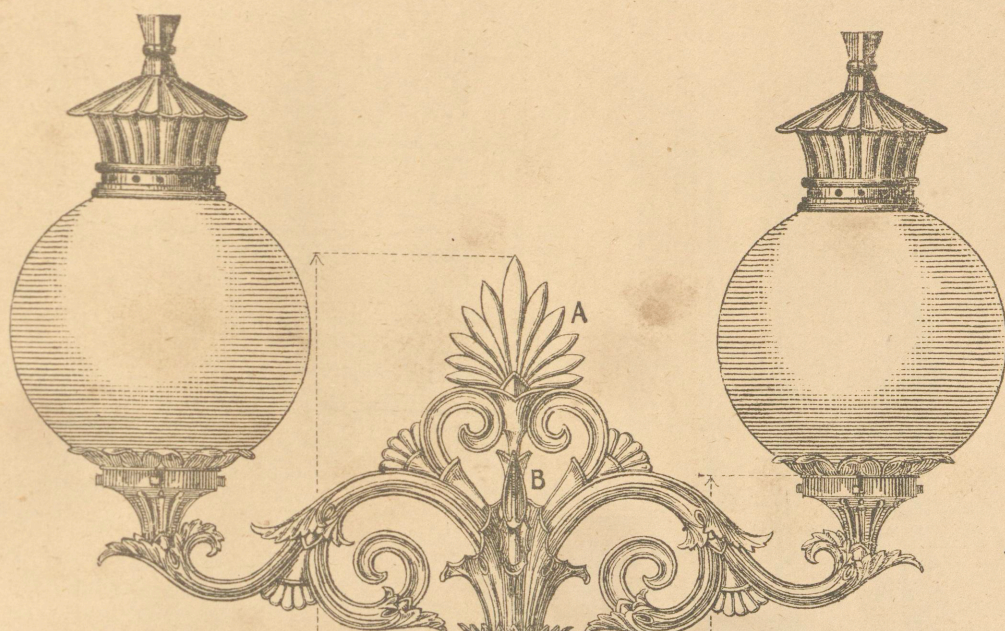
REGISTERED DESIGNS.



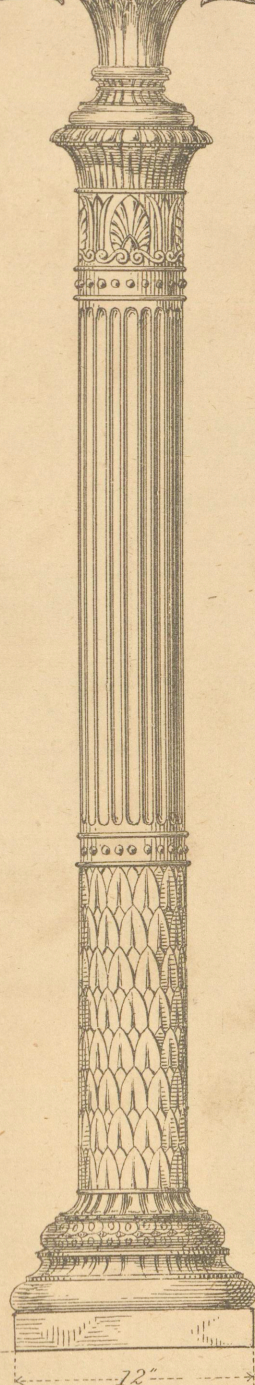
CENTRE ORNAMENT AT A  
WHEN WITH 4 BRACKETS.



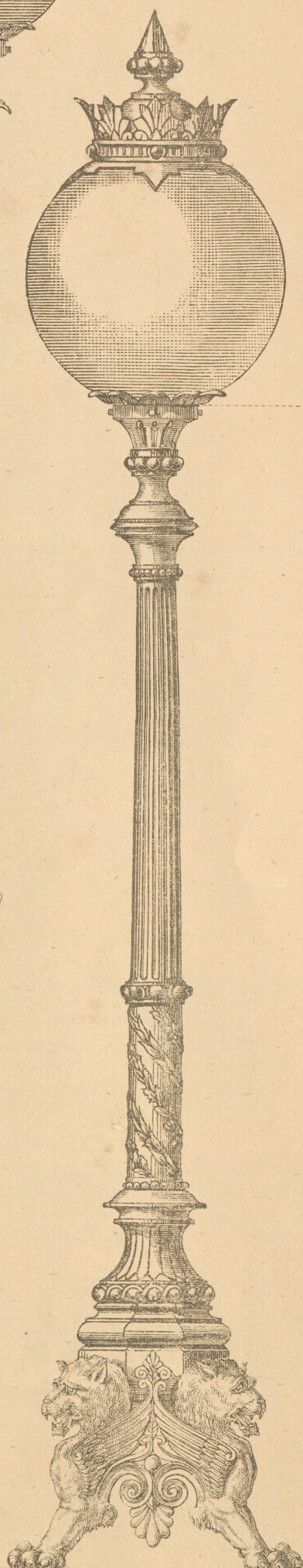
SIDE VIEW OF ORNAMENTS  
AT B WHEN WITH 2 BRACKETS.



No 77.



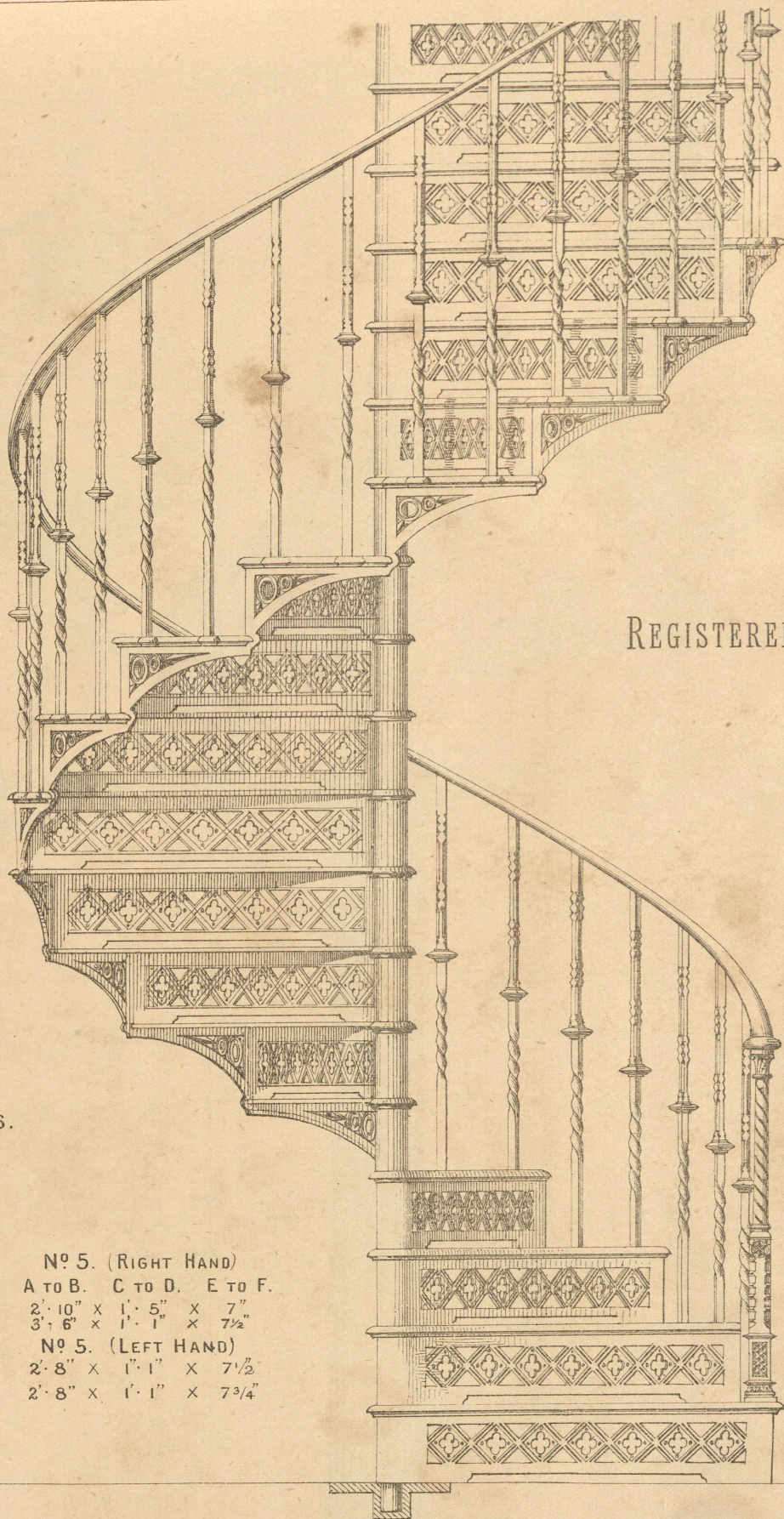
No 100.  
(2 OR 4 LIGHTS)



No 99.

Upwards of 150 different Patterns of Lamp Pillars and  
Lamp Brackets may be had; in every style of architecture, and  
specially suitable for streets, gate piers, pedestals, interiors of  
schools, churches, halls, &c.





REGISTERED DESIGNS.

CAST IRON ORNAMENTAL SPIRAL STAIRS.

Nº 4. (RIGHT HAND)  
A to B. C to D. E to F.  
1' 11" x 10 1/2" x 8"  
2' 1" x 1 5/4" x 5 3/4"  
2' 2" x 10 1/2" x 8 3/4"  
2' 3 1/2" x 1' 0" x 7 1/4"  
2' 6 1/2" x 1' 1 1/4" x 7 1/2"  
3' 0" x 1' 0" x 7 1/2"  
3' 1" x 11 3/4" x 7"  
3' 1" x 11 3/4" x 7 1/2"  
3' 2" x 1' 4 3/4" x 7"

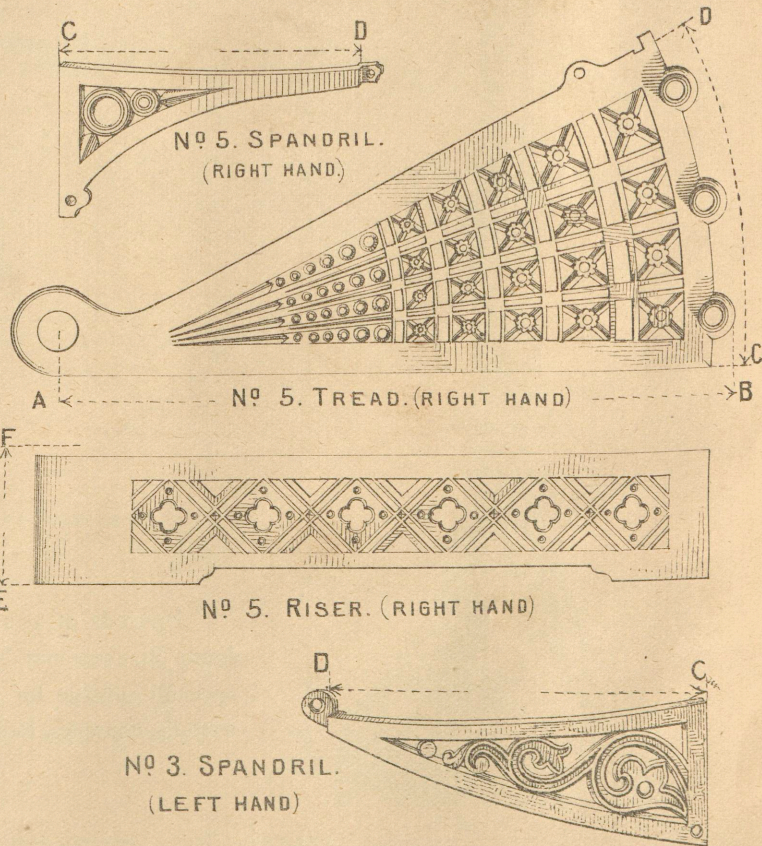
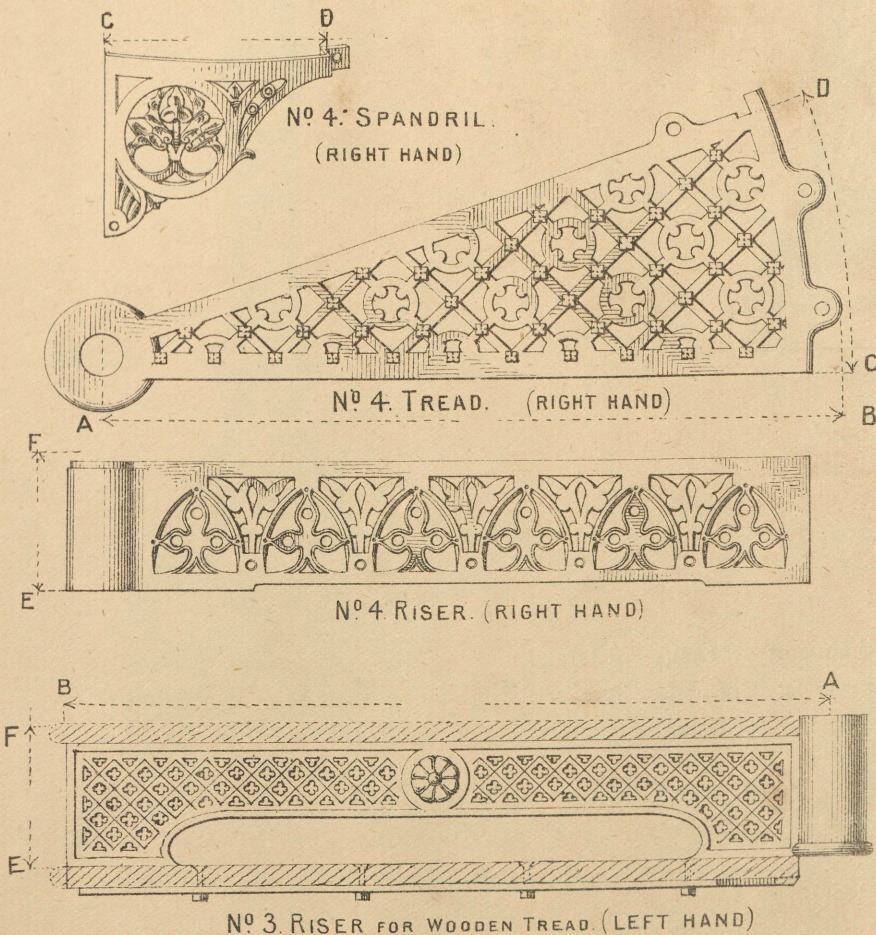
Nº 5. (RIGHT HAND)  
A to B. C to D. E to F.  
2' 10" x 1' 5" x 7"  
3' 6" x 1' 1" x 7 1/2"  
Nº 5. (LEFT HAND)  
2' 8" x 1' 1" x 7 1/2"  
2' 8" x 1' 1" x 7 3/4"

CAST IRON ORNAMENTAL SPIRAL STAIRS  
WITH WOODEN TREAD.

Nº 3. (LEFT HAND)  
A to B. C to D. E to F.  
3' 2" x 1 5/4" x 7 1/4"  
3' 2" x 1' 6 3/4" x 6 1/2"  
3' 2" x 1' 8" x 6"

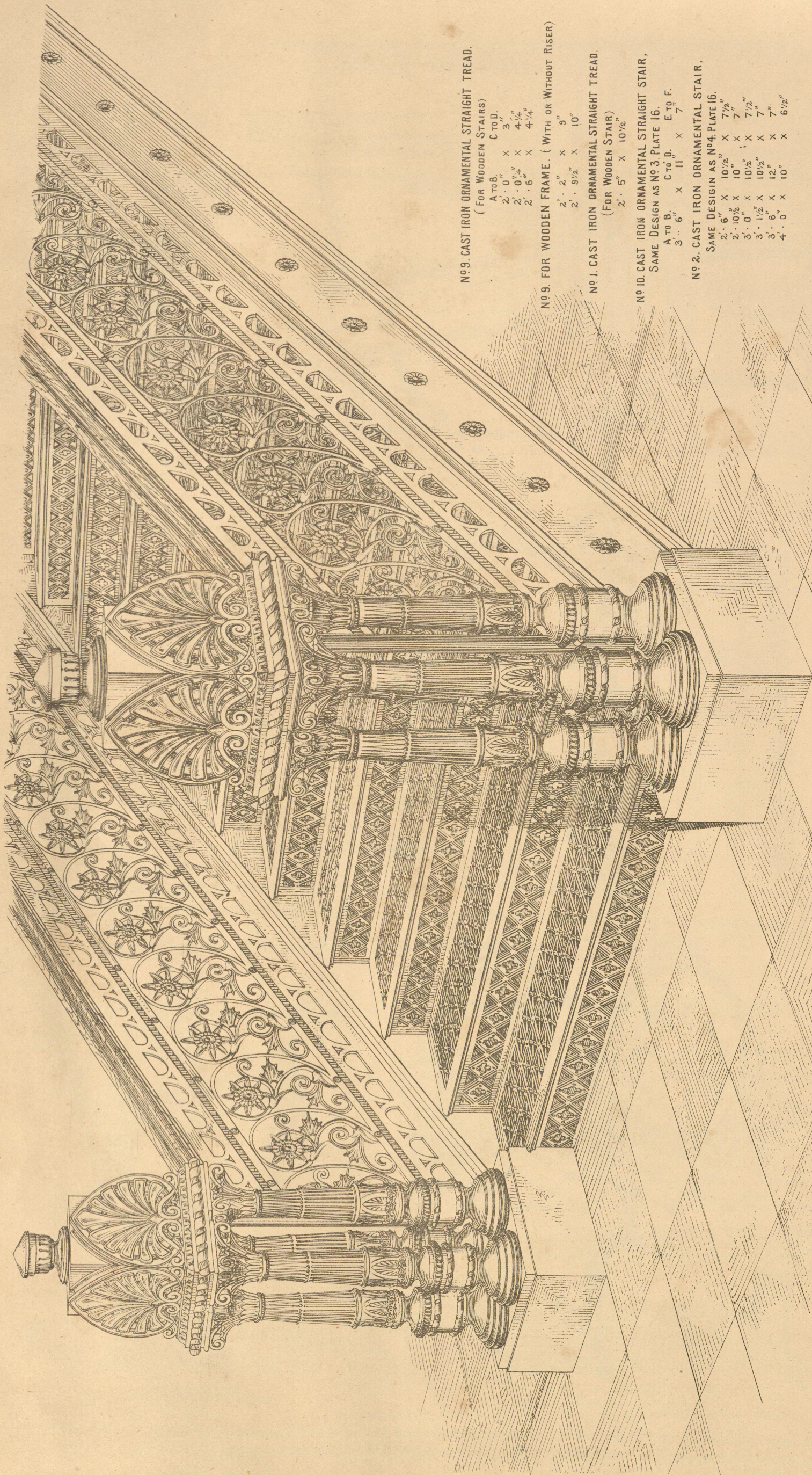
Nº 4. (LEFT HAND)  
3' 2 1/2" x 1' 3 1/2" x 7"

Nº 5 (GLASGOW UNIVERSITY PATTERN.)





REGISTERED DESIGNS.



Nº 9. CAST IRON ORNAMENTAL STRAIGHT TREAD.

(FOR WOODEN STAIRS)

A TO B.	C TO D.
2' 0" x 3"	x 3"
2' 0 1/4" x 4 1/4"	x 4 1/4"
2' 6" x 4 1/4"	x 4 1/4"

Nº 9. FOR WOODEN FRAME. (WITH OR WITHOUT RISER)

2' 2" x 9"
2' 9 1/2" x 10"

Nº 1. CAST IRON ORNAMENTAL STRAIGHT TREAD.

(FOR WOODEN STAIR)

2' 5" x 10 1/2"
-----------------

Nº 10. CAST IRON ORNAMENTAL STRAIGHT STAIR,

SAME DESIGN AS Nº 3. PLATE 16.

A TO B.	C TO D.	E TO F.
3' 6" x 11"	x 11"	x 7"

Nº 2. CAST IRON ORNAMENTAL STAIR,

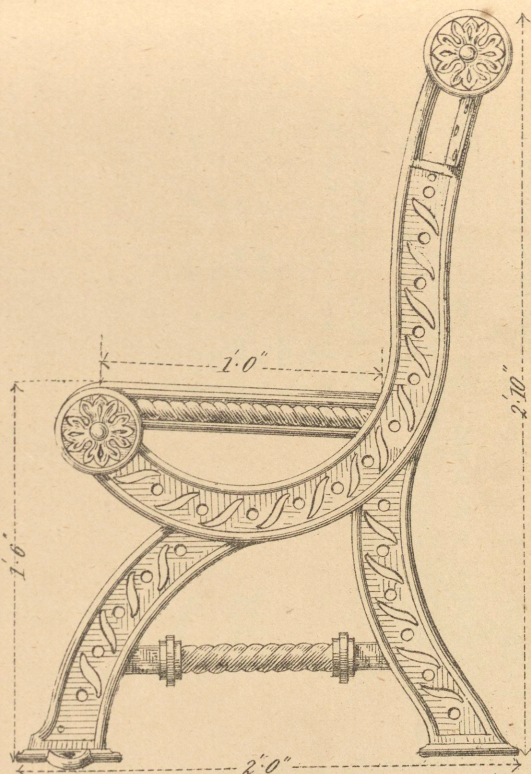
SAME DESIGN AS Nº 4. PLATE 16.

2' 6" x 10 1/2"	x 7 1/2"
2' 10 1/2" x 10"	x 7"
3' 0" x 10 1/2"	x 7 1/2"
3' 1 1/2" x 10 1/2"	x 7"
3' 6" x 12"	x 7"
4' 0" x 10"	x 6 1/2"

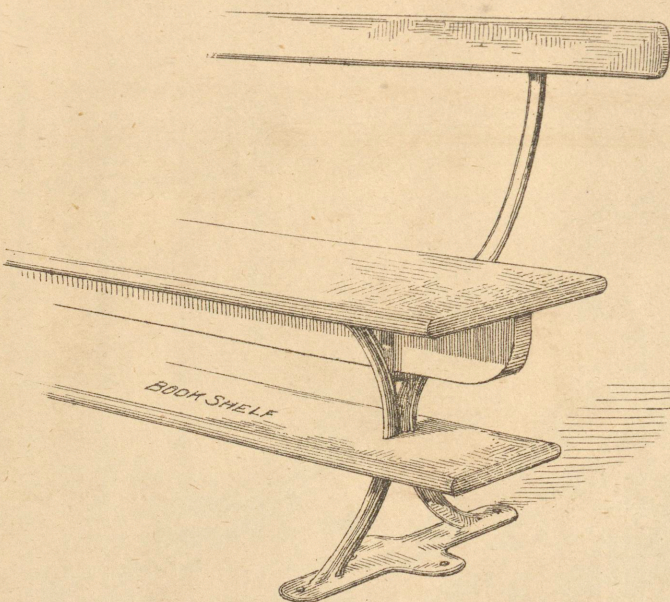
Nº 8. CAST IRON ORNAMENTAL STRAIGHT STAIR.  
5' 4" x 11 1/4" x 6".



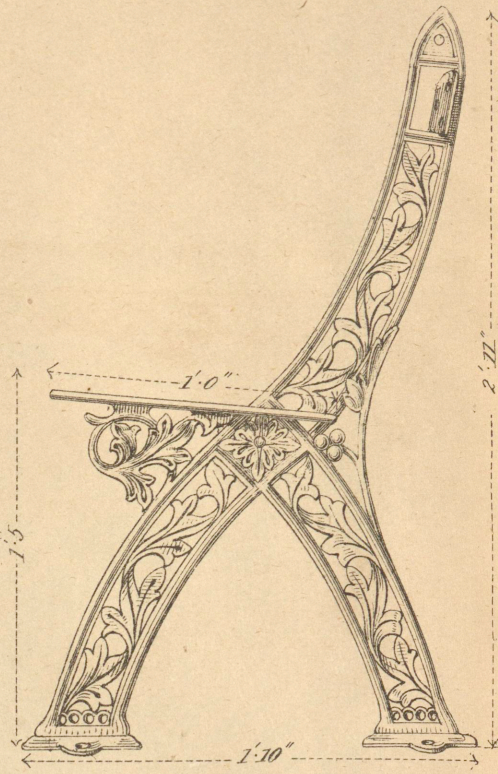
REGISTERED DESIGNS.



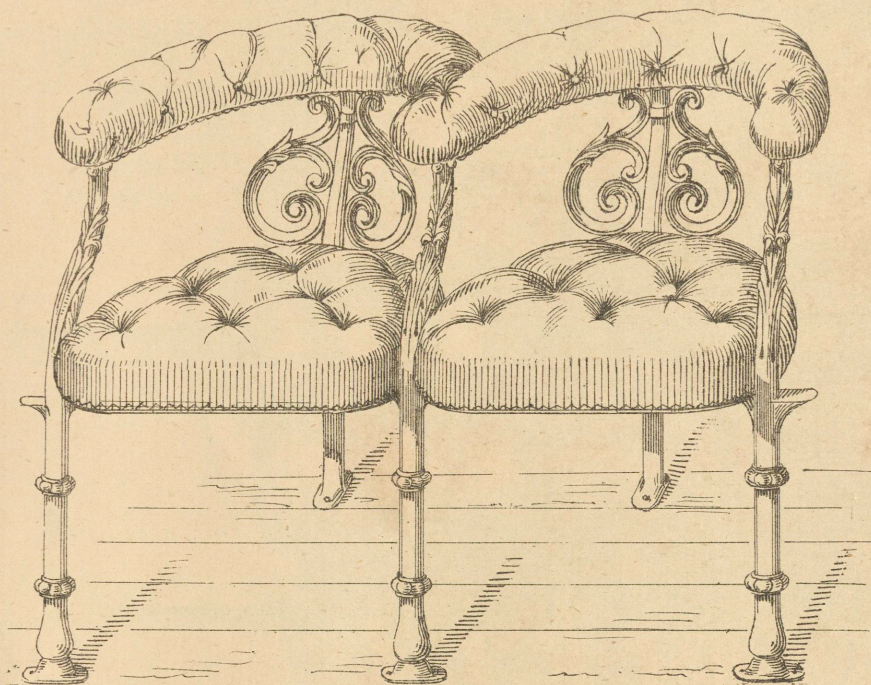
Nº 11. CHAIR STANDARD.



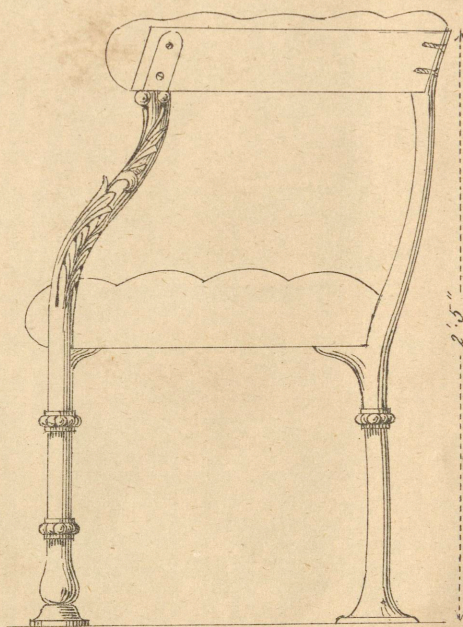
Nº 71. BENCH & BACK RAIL STANDARD.  
16" x 27", 17" x 29", 18" x 31", & 19" x 33",  
INS. HIGH OVER WOOD



Nº 12. CHAIR STANDARD.

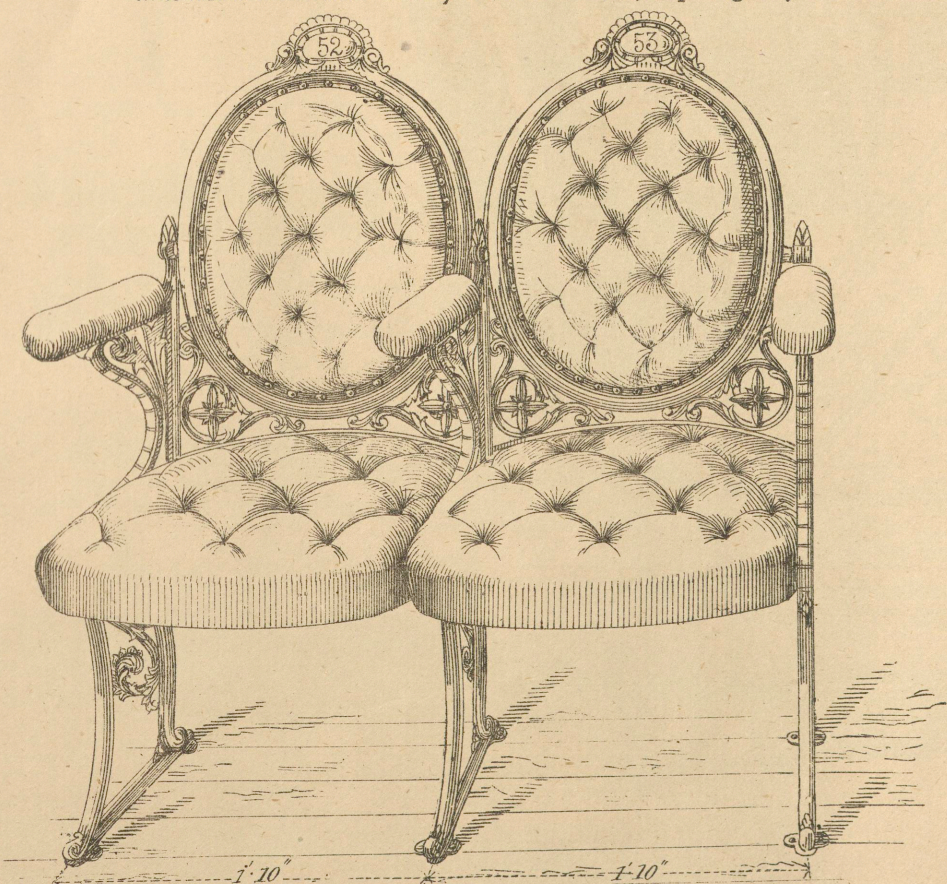


Nº 25.  
THEATRE STALL CHAIR.

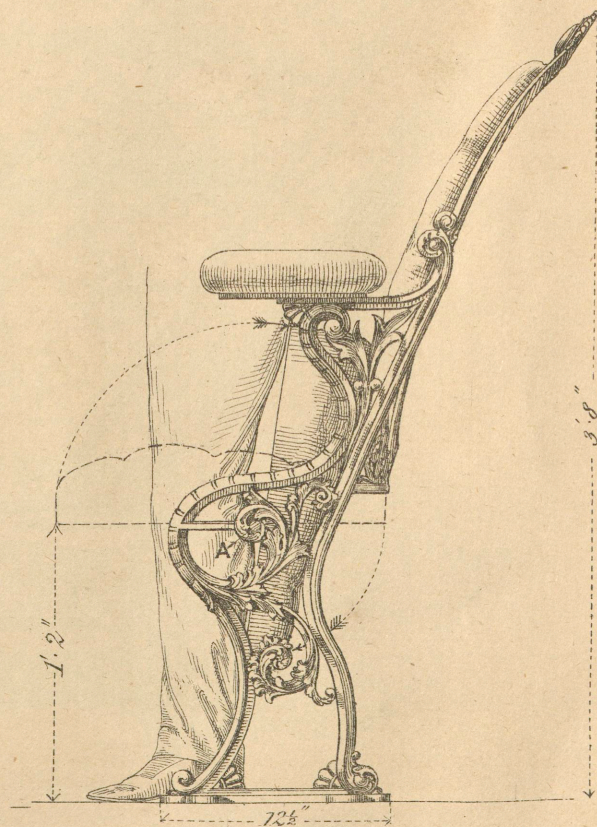


Nº 25.  
(SIDE ELEVATION)

Nº 25. THEATRE STALL CHAIR. A very comfortable seat, requiring only two standards for each person. Suitable for any width of seat.



Nº 70. THEATRE STALL CHAIR.



Nº 70. (SIDE ELEVATION) SHEWING SEAT WHEN TILTED BACK.

Nº 70. THEATRE STALL CHAIR. An exceedingly comfortable seat for Theatres, Halls, &c. Being hinged at A, the seat can be tilted up as indicated on side elevation, thus securing freedom of access to, and passage from places, with great economy of space. while the seat when down is perfectly firm and steady.

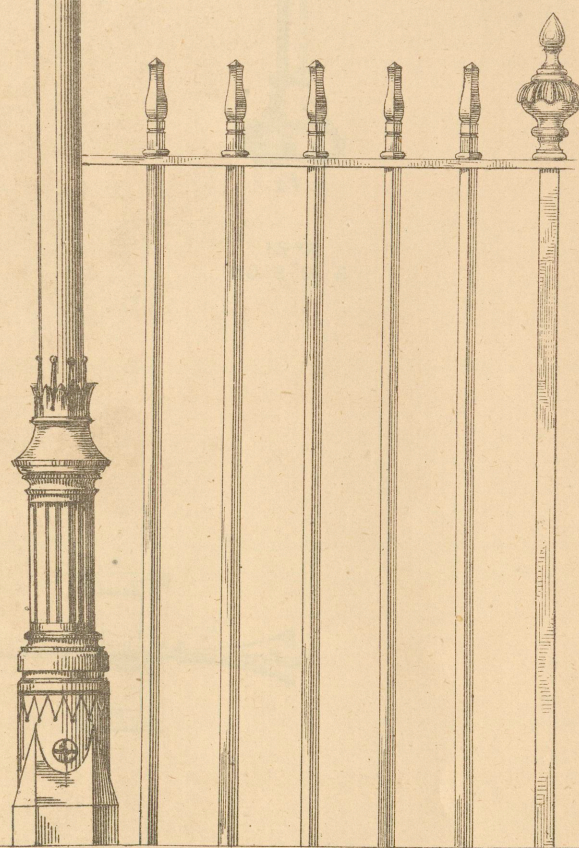
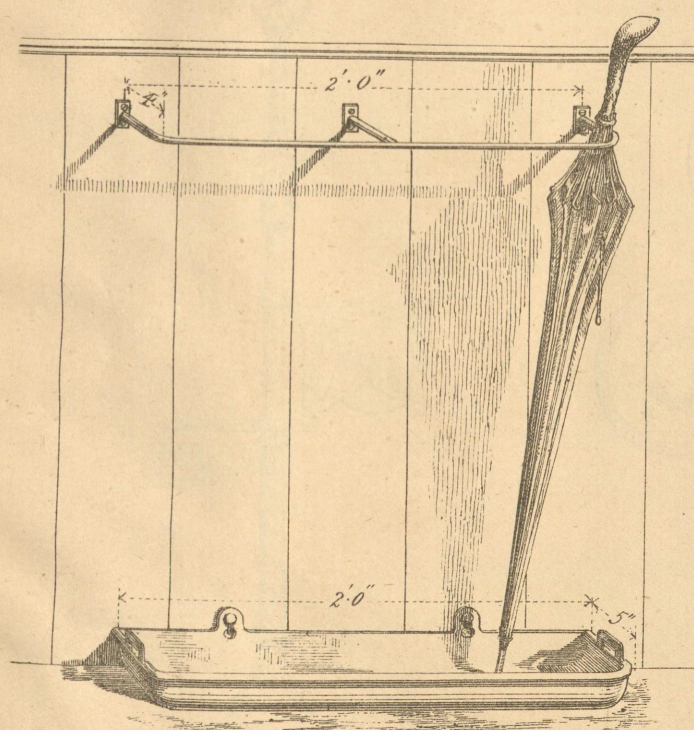


N<sup>o</sup> 6 VERANDAH.

Suitable for School Playgrounds, &c. By the combination of our various Patterns of Columns, Pilasters, Brackets, and Gutters, a very great variety of these may be had, appropriate to any style of architecture or requirement of position. Made any size to order.

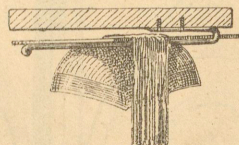
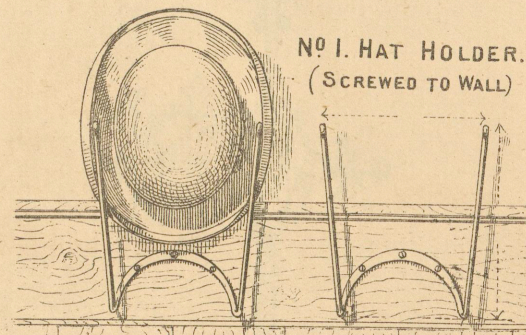
N<sup>o</sup> 517 RAILING

As approved of and specified by the London School Board.

N<sup>o</sup> 517. RAILING, 4' 6" HIGH.N<sup>o</sup> 2. UMBRELLA STAND.

N<sup>o</sup> 2. Umbrella Stand. A very useful article for Schools, Churches, &c., commended for its cheapness and efficiency. May be fitted against any wall, and can readily be removed and re-adjusted after emptying.

N<sup>o</sup> 1. Door Scraper. A convenient article, indispensable for preserving the cleanliness of Schoolrooms, Churches, &c.

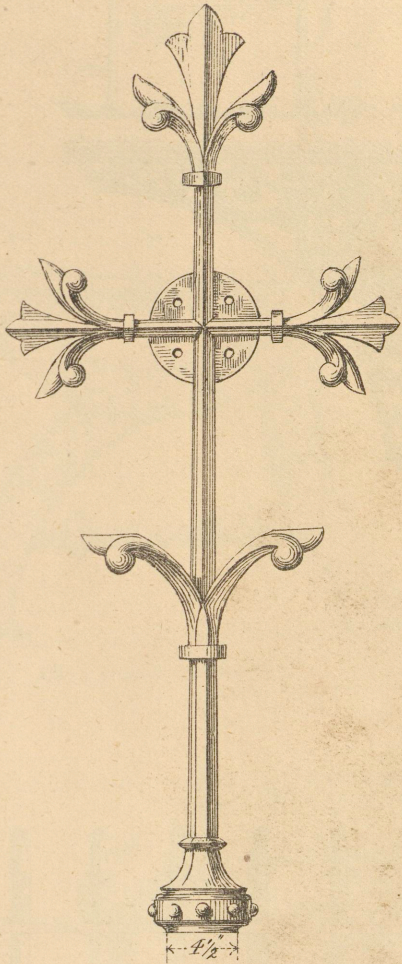
N<sup>o</sup> 1. HAT HOLDER.  
(SCREWED BENEATH SEAT)N<sup>o</sup> 1. HAT HOLDER.  
(SCREWED TO WALL)

N<sup>o</sup> 1. Hat Holder, as supplied to the Glasgow University and other public institutions. A simple, efficient, and cheap contrivance, serving its purpose either fitted under the seat or on doors, walls, &c.

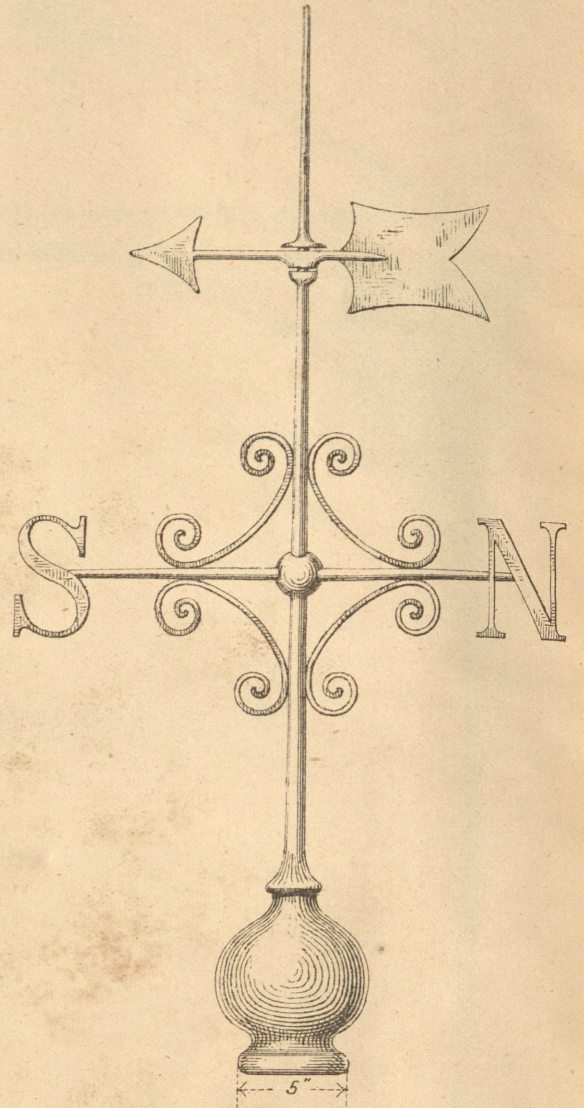
N<sup>o</sup> 1. DOOR SCRAPER.



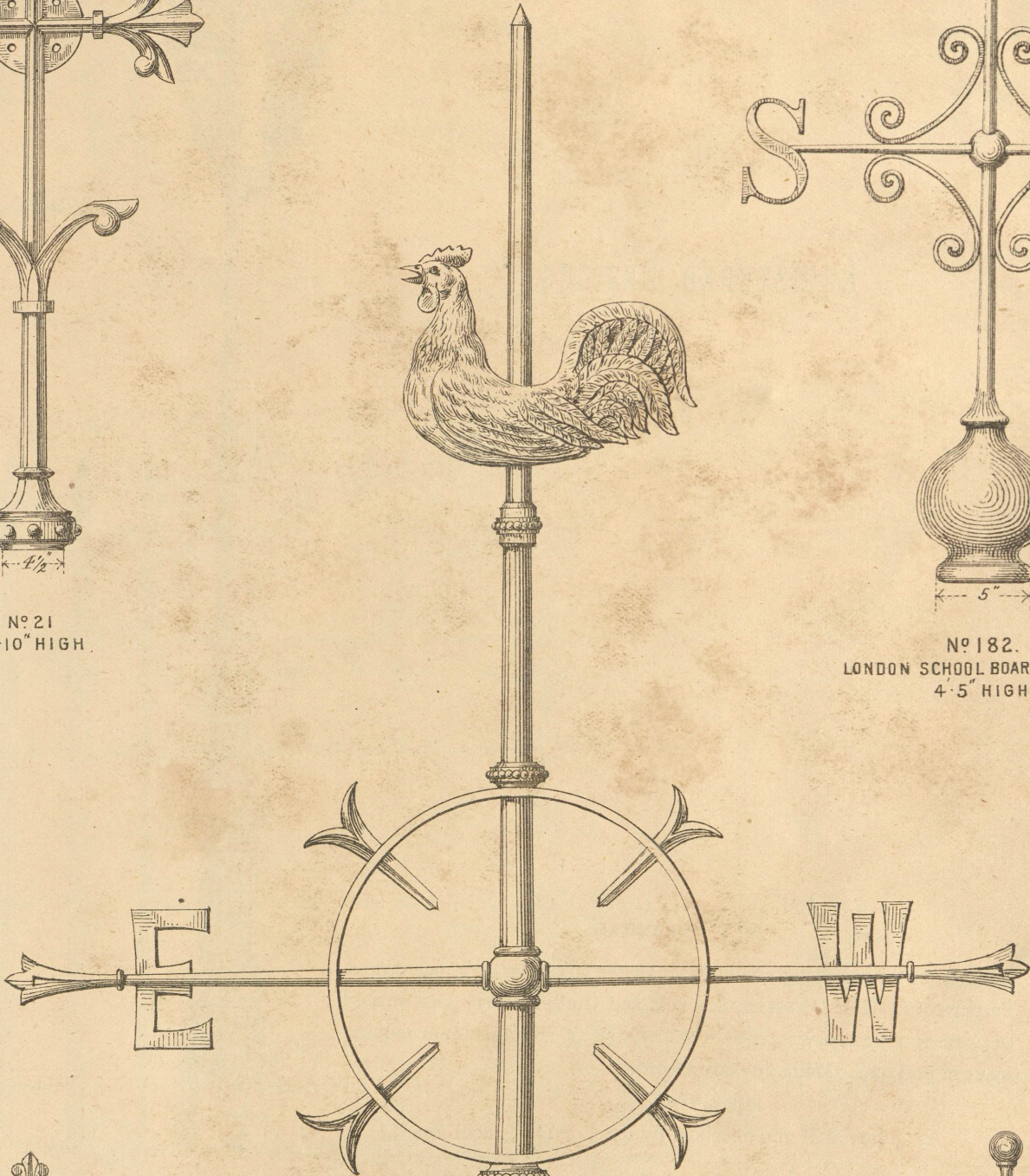
REGISTERED DESIGNS.



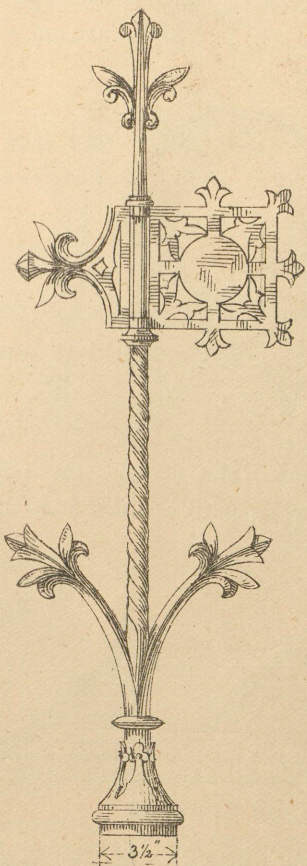
Nº 21  
3' 10" HIGH.



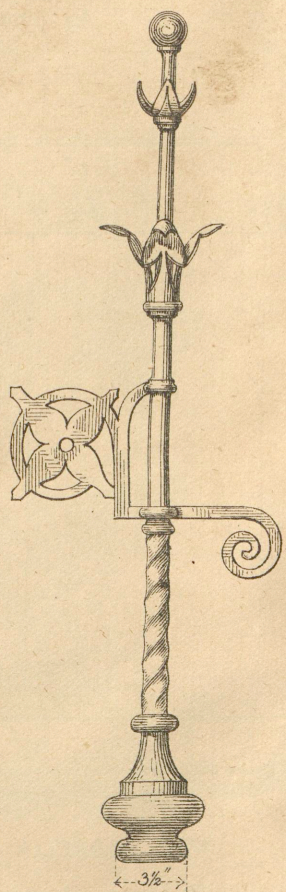
Nº 182.  
LONDON SCHOOL BOARD PATTERN  
4' 5" HIGH



Nº 101.  
8' 10" HIGH.



Nº 30  
3' 8" HIGH



Nº 31  
3' 7" HIGH















